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JOURNAL OF THE ROYAL HORTICULTURAL SOCIETY

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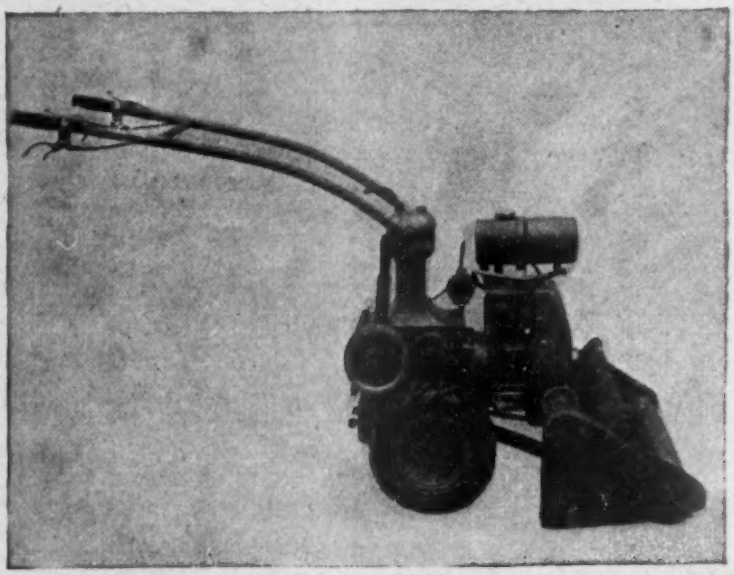

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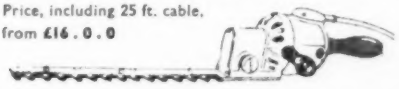

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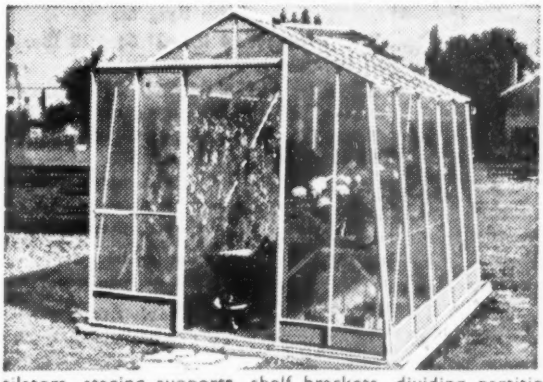

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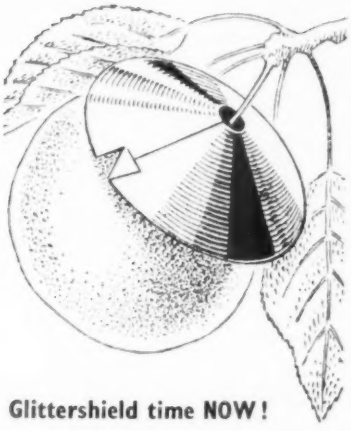

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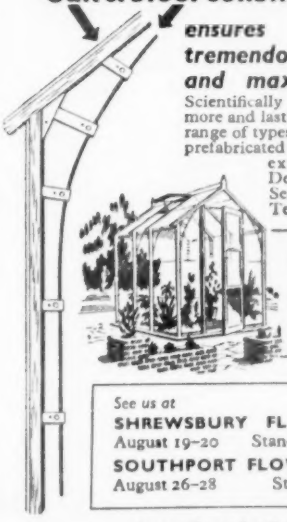

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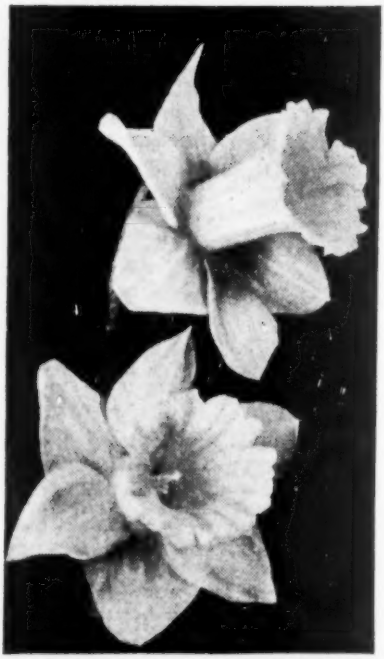

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JOURNAL of The Royal Horticultural Society

VOL. LXXVIII PART 8

AUGUST 1953

THE SECRETARY'S PAGE

ANNOUNCEMENTS—AUGUST AND SEPTEMBER

Shows

TUESDAY, August 11 12 NOON to 6 P.M. WEDNESDAY, August 12 10 A.M. to 5 P.M.	Fortnightly Show. Gladiolus Competition. British Fuchsia Society's Competition
FRIDAY, August 14 12 NOON to 6 P.M. SATURDAY, August 15 10 A.M. to 5 P.M.	British Gladiolus Society's Show.
TUESDAY, August 25 12 NOON to 6 P.M. WEDNESDAY, August 26 10 A.M. to 5 P.M.	Fortnightly Show. Cactus and Succulent Competition.
TUESDAY, September 8 12 NOON to 6 P.M. WEDNESDAY, September 9 10 A.M. to 5 P.M.	Fortnightly Show.
TUESDAY, September 15 1 P.M. to 7.30 P.M. WEDNESDAY, September 16 10 A.M. to 5 P.M.	National Dahlia Society's Show.
FRIDAY, September 18 11 A.M. to 7 P.M.	National Rose Society's Show.
TUESDAY, September 22 12 NOON to 6 P.M. WEDNESDAY, September 23 10 A.M. to 5 P.M.	GREAT AUTUMN SHOW. Alpine Garden Society's Competition. Cactus and Succulent Society's Competition.

Shows—*continued*

FRIDAY, September 25 1 P.M. to 7.30 P.M. SATURDAY, September 26 10 A.M. to 6 P.M.	National Chrysanthemum Society's Show.
WEDNESDAY, September 30 2.30 P.M. to 6 P.M. THURSDAY, October 1 12 NOON to 5 P.M.	Royal Air Force Horticultural Show.

Lectures

TUESDAY, August 11, at 3 P.M. "Sixty Years with the R.H.S." by MR. C. H. CURTIS, M.B.E., F.L.S., V.M.H.

TUESDAY, August 25, at 3 P.M. "Pelargoniums" by MR. J. CROSS.

Lecture on August 14—The British Gladiolus Society has arranged a symposium on "The Problem of Disease Control in Gladiolus Growing." This will be held in the Lecture Room of the New Hall at 3 P.M. on Friday, August 14, directed by DR. N. F. ROBERTSON. There will be ample time for discussion and questions, and Fellows and Associates are invited to attend. Inquiries should be addressed to the Hon. Secretary, The British Gladiolus Society, 165 Lynton Road, Harrow, Middx.

Demonstration at Wisley—The following demonstration will be given at Wisley, that on the second day being a repetition of that given on the first:—

Vegetable Garden

September 30–October 1—Digging, Trenching, Manuring and Composting in the Vegetable Garden. (Commencing at 2 P.M.)

The Society's Examinations—The Preliminary Examination for the National Diploma in Horticulture will be held on Saturday, December 5, 1953. The closing date for entry forms is October 1, 1953.

Survey of the Characteristics of Soils growing Calcifuge Plants—It is proposed to make a study of the chemical and physical properties of soils on which calcifuge plants are growing.

Since a wide variety of soils from different parts of the country will be required, it is hoped that Fellows who grow calcifuge plants will co-operate by sending in soil samples.

At present only soil samples from plants which appear to be growing satisfactorily are required.

The sample should be obtained by taking small amounts of soil from various parts of the rooting zone of the plant, or as near the rooting zone as possible, until half to three-quarters of a pound has been collected.

The following information concerning the plant is also required:—

Species — Variety — Approximate height and width — Age, if known.

Samples should be sent direct to Dr. A. H. Cornfield, Agricultural Chemistry Department, Imperial College, London, S.W.7.

The Species of Rhododendrons—A few additional copies of the second edition of this work, originally published by The Rhododendron Society, are now available. Price 30*s*., postage 1*s*.

NOTES FROM WISLEY

ALTHOUGH the Heather Garden is one of the outstanding features of Wisley at all times of the year the Heaths perhaps are seen at their best in August. This month, therefore, we discuss a few of the plants that may be found growing in this part of the Gardens which is best approached through the far end of the Wild Garden where one leaves the meandering paths for the open lawn of Seven Acres and the gently undulating slopes on which are planted many varieties of *Erica* and *Calluna* and other shrubs.

The first *Erica* that attracts attention is *E. vagans*, the Cornish Heath which, as those who have seen it growing on its native moors will know, is a strong but straggly grower. In the garden it is kept in bounds by cutting back annually. The urn-shaped purple flowers commence to open in August, those at the bottom of the spikes appearing first. Of the varieties of *E. vagans* we may note 'Lyonesse' which bears long racemes of white flowers, 'St. Keverne' which is dwarfer than the type and has flowers of rosy pink and the closely allied 'Mrs. Maxwell' which has longer racemes than 'St. Keverne' but perhaps is a little darker in the flower. Also to be seen are 'Pyrenees Pink' whose flowers, a rosy pink on opening, change with age to give the effect of a bicolour, and 'grandiflora' which is also a pink but is sometimes confused with 'rubra' which has deep red flowers.

The Dorset Heath, *E. ciliaris*, with the margins of its leaves strongly edged with hairs, will grow as easily on a dry bank as in a moister position which other species will not tolerate. The urn-shaped corolla with short rounded lobes is of a bright pink. Though *E. ciliaris* 'alba' produces an abundance of flower 'Stoborough,' another white, is considered the better variety. It is more freely growing and has finer individual flowers although it does resent a dry position. The strong-growing pink 'globosa' is always attractive with its broadly ovate flowers.

The Fine-leaved Heather, *E. cinerea*, also known as the Scotch or Bell Heather, has many varieties, the type forming a mat of wiry stems and producing purple flowers from June to September. Although *E. cinerea* 'Golden Drop' has pretty pink flowers the main attraction of this lovely plant lies in the bright coppery coloured foliage which turns to a deep red in winter. This variety has a fine prostrate habit and so is equally suitable for either the heather or the rock garden. *E. cinerea* 'coccinea' and 'atropurpurea,' both with flowers of a purplish

hue, are other dwarf-growing varieties although not so prostrate as the former; they reach a height of 1 foot whereas 'Golden Drop' seldom grows more than 6 inches tall. A variety of more recent introduction is 'Eden Valley' whose lilac pink flowers fade to white at the base of the petals.

Before further considering the Heaths it may be interesting to note some of the other genera that are associated with them in the Heath Garden. Of the Conifers there are many who consider that *Juniperus communis hibernica* with stiff and fastigiate habit is out of place in this very informal garden. Much more in keeping are *J. horizontalis procumbens*, the Creeping Juniper, and *J. sabina tamariscifolia*, the Spanish Juniper, the latter forming a vigorous spreading bush. *Chamaecyparis obtusa* 'ericoides' is a remarkable dwarf plant of dense habit, the varietal name referring to the Heath-like appearance of its juvenile foliage.

The Scots Pine, *Pinus sylvestris*, and the Silver Birch, *Betula pendula*, are the two trees which best harmonize with these surroundings. There is also a young tree of the Swedish Birch, *B. pendula dalecarlica*, which has a pendent habit and finely cut leaves and which later will prove to be a most ornamental addition to this part of the Garden.

Of the Rhododendrons mention may be made of *R. scintillans*, *racemosum*, *obtusum amoenum* and *myrtifolium*. The latter is more correctly known as *Kotschyi* under which name it was figured in the *Botanical Magazine* in 1926. It is a native of the Transylvanian mountains and like *R. ferrugineum* is a characteristic low-growing shrub of alpine vegetation. It is reported that it will grow on soil that has a substratum of limestone. The corolla is of clear rose and the stamens are entirely enclosed in the corolla tube.

Of the Genistas perhaps the most striking is the wonderfully graceful *aethnensis* which makes a bush up to 15 feet in height and covers itself with golden yellow flowers in late July. Unfortunately the plant tends to overgrow itself and the branches occasionally may need support. Another very floriferous species is *G. cinerea*, a native of the western Mediterranean; the yellow flowers first appear in June and continue into July. In contrast to these and to other Genistas, the bright golden *G. patula* forms a small loose bush 8–10 inches across and about the same height.

Of the closely allied genus *Cytisus* we may observe the white-flowered *albus*, the yellow-flowered *purgans* and the hybrid between the two 'praecox.' The latter is known as the Warminster Broom as it originated from Messrs. Wheelers of Warminster and as might be expected is creamy yellow of flower. Another genus which is also suitable for the dry bank is *Cistus*. The species and hybrids of these that are grown in gardens are not always fully hardy and may be killed by a severe winter. By August two outstanding ones have finished their flowering. They are the June-flowering *villosus* of purple hue and the red-blotched 'purpureus,' a hybrid between *villosus* and the white, crimson-blotched petalled *ladaniferus*.

To return to the Heaths the spring-flowering *Erica mediterranea* exserts its dark red anthers well beyond the mouth of the pink corolla. The variety 'superba' is a stronger grower and has flowers of slightly deeper pink, while 'glauca,' more usually called 'hibernica,' is dwarfer and less floriferous than the type. The hybrid between *E. mediterranea* and *E. carnea* is known as 'Darleyensis'; throughout the winter it opens pink flowers and thus is a very valuable plant especially for the small garden.

The many varieties of *E. carnea* give a great range of flower colour throughout the winter. Among the whites we have 'alba' and 'Springwood,' the latter considered to be the best white variety, for apart from producing a great mass of flower it grows very vigorously and spreads rapidly. In the pink range there are 'Springwood Pink,' an equally good doer as its white counterpart, 'gracilis' of rich pink and 'Queen Mary' of deep rose red. In the darker tones 'Vivellii' is a most distinct variety with bronze-coloured flower buds, brilliant carmine red flowers and dark green foliage which turns bronzy red in winter, whilst 'Ruby Glow' and 'King George' make beautiful low-growing plants of tufted habit.

E. Tetralix, the Cross-leaved Heather, like *E. ciliaris* will thrive in the moister positions; it has cylindrical to urn-shaped rosy pink flowers appearing from June to October. *E. Mackayi* has slightly deeper pink bells and may be a hybrid between *Tetralix* and *ciliaris*.

There is no dubiety about the parentage of *E. Williamsii*; it is a hybrid between *Tetralix* and *vagans*, having rosy flowers borne in terminal umbels. From the Western Mediterranean the greenish flowered Besom Heath, *E. scoparia* is represented as is its form 'pumila,' which rarely grows more than 18 inches high, whilst the Corsican Heath, *E. terminalis*, forms a bush 4–8 feet high. A native of Portugal *E. lusitanica* may grow to a height of 12 feet and is covered with white flowers during April and May. This species is reputed to be hardier than *E. arborea* which is also tall growing and white flowered and which is native to S. Europe, N. Africa and the Caucasus. A variety of *E. arborea* known as 'alpina' is to be preferred to the type for it is considerably hardier although it does not grow quite so tall. The Spanish Heath, *E. australis*, is likewise not fully hardy but where it will grow it is a most effective shrub, covered in April and May with rose red flowers. The white-flowered 'Mr. Robert' which is more compact than the type, is also less tender.

A near ally of *Erica* is the monotypic genus *Calluna*. *C. vulgaris*, widely distributed through N. Europe, Asia Minor and Eastern N. America, has given rise to many forms which provide colour from July to October. Of white forms we have 'Hammondii' which may be some $2\frac{1}{2}$ feet high and 'alba plena' which may be only half that height. Among the pink-flowered forms there are many to choose, but 'H. E. Beale,' which was found in the New Forest, is quite outstanding with pale pink double flowers borne in very long racemes and lasting well into November. From Yorkshire came another double form, 'J. H. Hamilton,'

whose flowers carried on a stem up to 9 inches high are of a brighter pink than those of any other heather. Of the low-growing pink forms 'Foxii nana' mainly attractive for its foliage and forming a very dwarf pincushion-like plant and 'County Wicklow' with pale pink flowers on almost prostrate stems should be noted as should three varieties with flowers of darker hue, 'Goldsworth Crimson,' a late-flowering variety, 'coccinea' with interesting grey downy foliage and the erect-growing 'Alportii.'

South Africa is famous for its large numbers of endemic species of *Erica*. As most of these Cape species require greenhouse conditions a small collection of them is to be found in the Temperate House where they provide colour in the early part of the year. Space permits mention of but two: *E. canaliculata* with white open bell-shaped corollas and a form of the long popular *E. ventricosa* known as 'major' with white to rosy flowers borne in terminal umbels.

MIXED SHRUB AND HERBACEOUS BORDERS

The Hon. Robert James

WHETHER from fashion or other causes gardens change. In my lifetime I have seen three distinct phases; the Victorian garden with the ribbon border, the carpet bed, the conservatory with its range of satellite greenhouses and tea on the lawn under the Cedar, brought out by butler and footman; then the Edwardian garden inspired by WILLIAM ROBINSON, the herbaceous border, and now the garden, as we know it to-day, with its alpines and shrubs.

On the whole we must account ourselves fortunate, because while our means have been seriously reduced and labour is scarce, our choice of shrubs and other plants has been greatly increased. Thanks to the various expeditions to the countries round the Roof of the World, the expeditions of FARRER, FORREST, ROCK, KINGDON-WARD, LUDLOW and SHERRIFF, we have a wealth of hardy and lovely shrubs quite unknown here in the latter part of last century. Shrubs take little tending, provided you follow the late MR. J. C. WILLIAMS' advice and do not put a five-shilling plant in a halfpenny hole. A garden of nothing but shrubs would have one serious fault in that they nearly all flower in the early part of the year and it is for that reason I am going to suggest a combination of shrubs and other plants so that our season may be extended to the maximum.

Gardening has many angles. The two main ones are aesthetic and practical. To-day I am concerned with the former. I want to picture a border that should give the greatest amount of pleasure over as many months as possible. In fact, to quote LORD BACON, I want to garden finely, but before I particularize I must give you the reasons for my

conclusions, so that you can understand my lines of approach. The Society has kindly offered me slides, but the garden I am going to try to paint is in my mind's eye and is the result I might say of a lifetime spent in the garden—looking intently and trying to grasp the why and the wherefore.

A border, like a picture, should, if possible, have a frame, say a hedge, a wall. It should also lead from somewhere to somewhere. The width should bear proportion to the length. Those are the bones. In the matter of planting I do not propose doing more than make suggestions. People's gardens should be their own and expressed in their own way. To that I hold most strongly. How boring they would be if they were all the same. Plant your garden for your own pleasure. If you do there will certainly be some who will appreciate it. Don't aim at getting the admiration nor the envy of your friends and neighbours. After all they are only in it for a short time. You are there all the time and even if they don't like the whole surely they can enjoy individual plants and there are few gardens where something is not growing superlatively well.

I am sure you would be kind to your plants. On the other hand don't let them bully you or each other. There are times when the good gardener must have a hard heart and a sharp knife.

Look at your border as a whole before considering the detail. Above all don't try and have something that would look like a many-coloured railway embankment. You must consider form and mass as well as colour, and if you want to have something superlatively good you must practise the art of restraint and perhaps concealment. POPE in an epistle addressed to LORD BURLINGTON put it well—

> 'Let not each beauty everywhere be spied
> When half the skill is decently to hide
> He gains all points who pleasingly confounds
> Surprises varies and conceals the bounds.'

There is a greater thrill to be got from finding than being shown things. If you have an exceptionally good plant don't of necessity stick it in the front; in fact, don't treat your garden like a shop window. If you can make things look as if they have happened you have gone a long way down the road to being a good, I might even say a great, gardener. However good a plant may be, don't overdo it. There is no beauty in the multiplication table. You will probably remember that HESSIOD said "the half is greater than the whole," and at least where art is concerned, and surely aesthetic gardening is an art, he undoubtedly was right. If you can avoid labels, so much the better. Nature does not use labels and we cannot avoid taking our lessons from nature. Besides they are expensive and the money spent on them would be much better employed in buying a few plants or seeds.

Choose your plants well. There is so much in selection. Judge plants by their garden and not by their florist properties. The difference may

be great. A thing may look well on the show bench but not so in the garden. In judging a plant look at it as a whole. If it lasts in flower for a long time give it extra marks. It is a good rent-payer. If it is scented it again gets marks, and if it throws its scent on the air still more marks. Take note how they fade because it may easily lose them marks. Another thing I would suggest particularly in the choice of plants is to avoid as far as possible those herbaceous plants that need staking and thus avoid unnecessary labour. It would be difficult to exclude Delphiniums especially by reason of their colour and form, but the staking should be done carefully with such things as Beech boughs and not have the wretched things tied up in faggots. Above all try to avoid any suggestion of money. Your plants are your friends, not chattels.

These generally are my main principles. We can now come to the border itself. Here we have first to consider form and then colour. With form I also include mass. Thus taller things should be planted at irregular intervals and some—not the tallest of course—should be allowed to come nearer the front. This will give variety—a first essential—and as everything cannot be seen at one glance will give a feeling of expectation. Masses too should not be uniform in size. In fact, in some cases I should be disposed to have but one plant, especially if it were remarkable in form.

When I come to colour I realize I am on more difficult ground. We all react so differently to colour and have our individual preferences. Personally, I have a strong feeling that above all a garden should give a sense of peace and if that is so then you will agree that our aim should be for harmonies rather than discords, and thus to be sparing in the use of violent contrasts. If this is accepted then your harmonies are already determined for you by nature. Spring is essentially yellow—in fact I believe in Hindustani the two are synonymous. Summer is blue, autumn brown. Spring more or less looks after itself, but the summer harmony is in cool colours and autumn in warm. The subtle must surely be preferable to the obvious. In midsummer when we are feeling hot we don't want to be hit in the eye with great quantities of violent orange, mustard yellow or pillar-box red, but if used with reasonable discretion these colours can be pleasing in the autumn. Since it inevitably attracts the eye white should be used with great discretion, unless we have a whitewashed wall for a background. Then a border of white and just off white flowers could be very beautiful. On the other hand silver leaves are invaluable and it is unfortunate our choice is so limited. Deep colours, too, blues, purples and reds, like the bass notes in music, give richness and so do deep shadows and I would consider them of first importance.

The backbone of the border I am trying to paint will, I think, of necessity be shrubs. Not only will they in time grow bigger than the other things but also help to make it look pleasing even in the winter months and with that particularly in view I would include among them a few evergreens—such as *Berberis, Darwinii* and *empetrifolia*—the

latter is also very sweet scented—also Broom, especially one called 'Cornish Cream' a good pale yellow that will not squabble with its neighbours in colour and is a beautiful green in winter. *Daphne pontica* is another evergreen worthy of a place. It is not showy but the flowers are sweet, in fact I would have as many Daphnes as possible, the old *Mezereum* mauve and white and, of course, if you can grow it, *cneorum*. There are other sweet-smelling shrubs for which I would find a place—*Lonicera syringantha*, that throws its scent far and wide—not showy but a pleasing plant, some of the dwarf Syringas and Philadelphus—*Viburnum Carlesii* and its hybrids. Should you wish to include Rhododendrons I think they should be planted at the far end of the border, giving thus a dark and solid background. In the choice of shrubs generally I would aim at spreading out the season as much as possible. In the spring and early summer your choice is great but as the season advances, unfortunately, it is less, still there are the deciduous Ceanothus—*Caryopteris clandonensis*, and some of the Hydrangeas, and amongst which I put *Hydrangea villosa* first. There is, however, one order of bushes that I have so far not mentioned, but which for a border of this kind must I think take first place and that is the Rose, and I refer particularly to the so-called old Rose or bush Rose. Here we have something to which I would give full marks. The flowers are incontestably lovely—they have scent, they have profusion, they have charm, and are semi-evergreen. True most of them only flower once in the season but they do it wonderfully and would impart to the border that something personal which to my way of thinking is the first essential of a good flower garden. Of course, to prolong your season you may also include some of the modern Roses and thus get their late flowering, but few of them make pleasing plants and certainly should be under-planted with such things as *Viola cornuta* or Pansies. Some of the Rose species too are very beautiful, but their flowering is fleeting and unless the border were very big they possibly would be considered to pay insufficient rent. Still there should always be a place for a Sweet Briar.

As the shrubs begin to go over herbaceous plants will take their place, and after them some well-chosen annuals, but the season must begin with bulbs. Under the deciduous bushes I would plant Snowdrops and winter Aconites and where they get a little more light Scillas and Chionodoxas. But for that matter all over the border, particularly in such parts that get some daylight I would plant bulbs of all sorts, Tulips, Daffodils, Muscari, Scillas and Anemones, *A. sylvatica*, *nemerosa*, *appenina*, *blanda*, and if possible Hepaticas. Leave them to look after themselves. If they get dug out put them back. Planted like this bulbs look so much better than they do in beds set out in strict military formation. Primroses and Forget-me-nots too are always worthy of a place. Wallflowers planted amongst herbaceous Paeonies make a happy combination. In fact, as far as the spring garden is concerned there is no difficulty except in the matter of choice. There is, however,

an interval between the spring and summer garden of which no doubt we are all aware; the moment when there seems to be little in flower except the Columbines. We must, therefore, allow them some place, long spurs or short spurs or both. They will always look well.

We come now to the summer garden when many of the shrubs will be going over and the herbaceous plants are coming into flower. The choice is not so much a matter of what to have as what to avoid, such as plants which when they have flowered leave nasty raw places behind or that are likely to injure the shrubs. Various Campanulas associate beautifully with the Roses and mauve Violas such as *cornuta*. It would be difficult to overdo Violas and Pansies, named Pansies, mixed Pansies. There always seem to be a Pansy for every mood. There is that something intensely personal about them. Besides if the dead heads are regularly removed they will flower the season through.

Few orders of plants, if any, are more beautiful than Lilies. Planting them in herbaceous borders is not, however, generally recommended. Muddled up with other things they cannot show their beauty of form, nor are they likely to thrive. However, in a border such as I am suggesting a bay or bays between shrubs could be well devoted to them, provided always that there is reasonable drainage. That many Lilies are capricious I will admit—still there are some that are not exacting and they are certainly worth a little trouble. I often wonder how it is that people are prepared to pay quite a lot in buying plants and yet not get that something extra in the way of soil that they want for their well being. I plead guilty to having killed many plants from ignorance, but if I knew that a plant needed a certain soil condition I had not got I would certainly see that it was there before I got the plant. But in this connection I should offer a word of warning. If you are making artificial conditions do not make pockets of soil, make a bed. There will be plenty of other things that will like it. Thus I am sure you would find many Lilies that would be happy in a bed of leaf soil and sand. If you can come by old woodland soil, better still. Supposing that buying Lily bulbs is beyond your means raise them from seed. They are not difficult. I admit it means waiting, but to make a good garden must mean time and the best gardens have all started in the seed pan. Besides we are living in times where the amount we can spend is small.

Supposing you are prepared, as I should like, to go to the length of creating artificial soil conditions and above all giving sufficient drainage, then you might well consider giving some space to a few of the less exacting alpines say, for instance, such things as Gentians, but it would be necessary to see they were not overgrown and their neighbours would have to be carefully chosen.

So as still further to prolong your season it will be advisable to devote some space to well-chosen annuals. I would always include the common white Tobacco, just for its smell, and Mignonette. But I can find no reason why anything should be excluded, except for the fact that its colour might clash or that it would be out of scale. I expect if a

census were taken as to the best garden, the real cottage garden would win. True it is a small canvas and it is easier to paint a small than a large picture, but I think there is more to it than that. It is certainly personal. The individual plants have been tended as by a friend, but above all it is inconsequent and it is that inconsequence which we so rarely meet in the larger garden. What is it? No rule and surprises I suppose, and I think we want to have surprises. We do not want to know beforehand what we are going to see.

I have abstained from giving lists of plants. There are so many and so well known, and as I have already stated we should all choose our own plants and not leave the choice nor the placing of them to others.

If friends should ask what is the best time to visit the garden one ought to be able to say any time with the possible exception of August. August is certainly not a good month in a garden such as I am visualizing, which is not a Southport show. There are few good things in flower then. One is conscious that the best is over, but September brings a new lease of life, particularly in the South. Choice of good plants is not difficult. Various Salvias, *Nerine Bowdeni*—the free-flowering form called, I think, 'Fenwick's variety' which can carry on into November—*Sternbergia lutea*, Autumn Crocus. For their flowers I would include Colchicums, but they have a nasty way of dying down in early summer when everything else is fresh and green. Then if your soil is lime-free, or if you can make a lime-free bed there is the lovely *Gentiana sino-ornata* and, of course, the Michaelmas Daisies, and if you can come by them the Chrysanthemum such as used to grow in the cottage gardens and, of course, the late-flowering Roses, which I suppose would be mostly modern ones, but there is always the common old monthly Rose which in the south should go on flowering right up to Christmas. We always used to have a bowl of monthly Roses on the table at Christmas when I was young. No plant in the garden goes on paying rent as this does. In the early year the flowers are of a pink that is rather difficult so that if possible their neighbours if in flower at the same time should be carefully chosen and so avoid squabbling, but in the autumn they are a lovely delicate shell pink.

You will perhaps have noticed that I have given great prominence to the Rose. It is because I think it is the perfect plant for such a border, but I have also come to think that it is the right way to plant Roses. The so-called Rose garden is not to my mind satisfactory. Looked at as a whole, which is how we should look at it, it is nothing but spots and, therefore, monotonous. If Roses are wanted for their flowers or for exhibition blooms far better plant them in the kitchen garden, but if we want them to take their place in the flower garden, to which they are most certainly entitled, let them be in company with other things and, if possible, underplanted to avoid bare soil round them. They root deep and will probably be unaware of any competition.

A border such as I have outlined has two advantages over the ordinary herbaceous or annual border. First, by reason of the shrubs,

the labour—always an important item—will be substantially reduced. There will be less splitting and digging and staking. Secondly, instead of looking naked and deserted in the winter there will still be colour—the colour of the twigs which in such things as some of the Deutzias and Philadelphus is beautiful—there will be Rose hips and, possibly, berries if the blackbirds have not eaten them, and evergreens. For it to have the appearance of being cared for all the time all that would be necessary would be to cut down the herbaceous plants when they have turned brown and remove the dead annuals. From a gardening point of view we in this country are greatly blessed in the matter of climate. Unless we are under snow, and that even in the north is the exception rather than the rule, there is not a month in the year when we cannot pick a flower out of doors. We should not, therefore, turn our backs on our garden in the winter. The Christmas Rose will be there to tell you that the first Snowdrops will not be long in coming.

However great pains we take mistakes are inevitable, cultural as well as aesthetic. Plants do not necessarily flower as and when we expected; combinations we had intended do not come off. Year after year we have to go on trying to correct, taking careful note all the time. In this way the garden will go on improving, getting gradually more character, more individuality. Gardens should improve with age and if they are loved and tended they will.

PREPARATIONS FOR THE WISLEY EXHIBIT, CHELSEA 1953

F. E. W. Hanger

WITH the prospect of thousands of overseas visitors coming to this country to witness the historic ceremony of the Coronation, the late President and the Council of The Royal Horticultural Society were anxious to make the Chelsea Flower Show of 1953 worthy of this momentous occasion. The dates of the Show, May 19–22, almost preceding the Coronation, offered an opportunity to stage an important collection of representative hardy woodland plants from the Society's Gardens at Wisley, in as natural a setting as possible within the marquee.

The position allotted at Chelsea was a large island site on the axis of the main entrance to the huge 3½-acre marquee. Covering an area 68½ feet × 44 feet with a frontage of over 225 feet, it was the largest exhibit ever to be staged in the tent at a Chelsea Flower Show. There were, however, two drawbacks to the site. In the centre was a large stone obelisk mounted on the top of a stepped square base, 6 feet high and 19 feet on each side. This monument, austere and formal, reached up 24 feet through the roof of the tent. The second drawback was the

hard tarmac road on which the exhibit had to be staged for it meant that nothing could be sunk or planted below ground level.

This awkward formal setting had to be transformed completely and made to appear to look like a woodland, if woodland plants were to look their best. It was a simple and logical solution to disguise the obelisk as a forest tree, and with the aid of three-ply boarding and sheets of bark stripped from old Scots pines (*Pinus sylvestris*), it was made to appear as a grand old tree. The square foundation 6 feet high on which the "tree" stood remained a problem. This was overcome by forming a gently sloping hill with grass paths leading up to the "tree." This was constructed with 300 fruit boxes and about 60 tons of peat. What had been handicaps were now assets; the slopes made possible a series of peat walls and banks of shrubs which would have been impossible on a level site of such generous dimensions.

The scale of this exhibit made it evident that thousands of plants would be necessary to furnish it. The exhibitor has two alternatives when preparing a group of such magnitude—to wait until a short time prior to the show and then to lift from the woodland the plants necessary to fill the allotted space, or to have everything under complete control by potting and boxing the previous autumn and then to time the plants to flower for the date of the Show. The first choice is much less trouble, but it carries with it far greater risk. Seasons vary regarding earliness or lateness from year to year and should spring frost be experienced during the month of May, many of the plants necessary are likely to be ruined. The second choice is by far the most systematic, and with enough glass providing variations of temperature a wide range of subjects can be made to flower at the appointed time.

There is a school of thought which maintains that it is deceiving the public to show plants in flower out of their natural season. This may be so to a certain extent, but the immorality of such a deception is far outweighed by the opportunity and pleasure it gives to the majority of seeing a wide range of different genera of plants flowering at one time.

Nevertheless, much time, patience and trouble was needed to make sure that the collection of plants including trees, shrubs and flowers were in the pink of condition on the opening day of the Show. It is of no avail to have the plants in full bloom a week too early, or on the other hand, a week too late. Perfect timing requires a thorough knowledge of all the plants on the part of the person responsible. When dealing with one genus this is not an unduly complicated business but when many genera are involved, as was planned in the comprehensive Wisley group, difficulties arise which put experience, ingenuity and initiative to a hard test.

Preparations commenced nine months previously, in August, when the students began potting Primulas, Meconopsis, Lilies, Ferns, etc. November found them searching Battleston Hill for doubtfully hardy Rhododendrons, lifting and balling them to be placed in positions to safeguard their flowering buds should the winter prove severe.

Over 70 species or varieties of Primula were exhibited in the group with normal flowering periods, which varied from *P. Edgeworthii*, *Clarkei* and *scapigera* early in March, *rosea* and *denticulata* in late March and early April, *aureata*, *farinosa* and *bhutanica* in late April, *Cockburniana*, *geraniifolia*, *jesoana*, *pulverulenta* 'Bartley Strain,' etc. with normal flowering seasons at approximately show time, to the later bloomers, *P. nutans*, *Viali*, *chionantha*, *aurantiaca*, *alpicola*, *sikkimensis*, *sinopurpurea*, *helodoxa*, etc., in June and early July. All must be timed to flower for Chelsea. To accomplish this *Primula Edgeworthii* was sent to cool-air storage on December 18, 1952, to be followed a month later by *P. rosea*, *denticulata*, *Clarkei*, *bhutanica* and *Griffithii*. At the same time the late-flowering varieties were taken from the cold frames and given a gentle start in the early vinery; others were allowed to come along gently in the cold frames, while the remainder were left growing in their woodland positions to be lifted just before the Show.

Deciduous plants and Primulas with dormant resting crowns lend themselves ideally to cool-air storage in a temperature of 34° F. (two degrees above freezing point) and can be left under such conditions for a long time. But it must be remembered that there is little or no light in these stores, and there is a limit to the length of time it is advisable to leave evergreen plants in cool-air storage.

Plants of *Primula rosea* were lifted from the open on January 21, balled up in moss, sent to cool-air storage where they remained without moisture until May 10. Then they were removed, placed in a cold frame where they opened their flowers in ample time for the Show ten days later. *P. Clarkei* and *P. denticulata* were stored on the same day as *P. rosea* but needed fourteen days to be in full bloom.

The more or less evergreen *P. Edgeworthii* and *P. scapigera* remained in cool-air storage from December 18 until early in the following May (four and a half months) and when removed appeared to be in the best of condition with their leaves quite healthy and the rosette of buds showing plainly. Unfortunately only a small percentage of these buds opened successfully, the long retardment having prevented the development of the flowers.

No cool-air treatment was needed to provide a comprehensive collection of Lilies; on the contrary, heat was necessary to force them into bloom by the third week in May. Most Lilies normally flower towards the end of June, a few in July and others as late as August. Only, perhaps, the *umbellatum* varieties could be counted on to flower naturally for the Show, and even then the season would have to be an early one.

All Lily bulbs for forcing were potted up in the late autumn, placed in cold frames, buried to a depth of 4 inches in granulated peat, and afterwards covered by lights. Here the pots remained until they were full of roots. This is most important as no bulbs can be forced into growth successfully without an abundance of roots. The Wisley exhibit contained over fifty species and varieties. A good knowledge of Lilies is imperative to judge the time needed to obtain the maximum

results for Chelsea week. Some needed almost five months to attain perfection; others four, while three months of gentle forcing was ample for others. The whole timing technique is a most absorbing and interesting procedure. As the date of the Show drew near certain individual plants almost lived on the hand-barrow, being moved from house to house to gain or to lose a day. At this period a week's heatwave may throw all previous calculations into chaos, and plenty of air and shading was made available. A daily tour of every plant was made to select plants needing more or perhaps less heat, and as the date for perfection came in sight such tours were necessary twice daily.

It is a wise plan to have plants backward rather than too advanced, as it is far easier (if glass is available) to force a plant into bloom than to hold it back once it is in flower. When exhibiting, freshness counts enormously and a percentage of unopened buds adds to the beauty and assures life and interest in the group until the last hours of the Show.

Careful attention to details of culture must be given at all times. Some of the 'Bellingham Hybrid' Lilies shown in the Wisley exhibit were 8 to 10 feet in height, a single stem carrying upwards of twenty flowers. To attain such perfection culture of the highest degree was demanded. Four large bulbs were placed in each 12-inch pot, but the young growths were so strong that it soon became evident that the pots would not be large enough for the development of the spikes, in some cases up to twelve in number. To get over this difficulty 10-gallon oil drums were purchased and after careful preparation the Lilies were transferred to these galvanized containers. Although Lilies in pots must be carefully watered at all times, these in such large containers needed special attention, not only immediately after potting on, but until they were well established in the additional compost. After that, during very hot and sunny weather, it was necessary to water them well, three times daily.

The selection and lifting of choice Rhododendrons, Menziesias, Enkianthus, Pieris and other shrubs was also an exacting task. Some of the Rhododendrons were 12 feet and more in height. As Rhododendrons are very fibrous-rooted, they are amongst the easiest of plants to lift and transport successfully, but it is necessary to prepare them with balls of soil according to the size of the plant. Being vegetative reproductions of First Class Certificate plants, great care had to be exercised to assure a sufficiently large ball of soil to enable these extra special plants to withstand the hardships of the journey. The largest Rhododendron exhibited from Wisley carried about 4 cwt. of soil. Each ball was contained in strong wire netting which had previously been lined with coconut fibre.

To flower the collection of Rhododendrons it was necessary to retard some in cool-air storage. The deciduous species, i.e. *R. Vaseyi*, *Albrechtii*, and *Schlippenbachii*, needed to be checked for about a month. The evergreen *R.* 'Moonshine' crosses and other seedlings

raised at Wisley required the same treatment for three weeks while for the dwarf *R. saluenensis*, a fortnight seemed enough.

Rhododendrons for retarding in cool-air storage should be left in the ground until their flower buds begin to show the first signs of colour. They should then be lifted, and sent to storage immediately, after making sure the balls of soil have been thoroughly soaked with water. Should Rhododendrons be disturbed and lifted from the open ground before flowering buds are fully developed, the check often proves detrimental and alters the true character of the flowers. This adds to the difficulty of assessing the time schedule, and there is the risk of ruining the plants for show purposes.

Large-leafed varieties of Rhododendrons should not be left in the darkness of the store room more than three weeks; if left longer the leaves are apt to become marked with brown spots, and the flowers lose a little colour. However, the plant of *R.* 'Elizabeth' shown in the Wisley group remained in these adverse conditions for a little over four weeks with no ill effects.

Rhododendrons if stored when the colour of the blooms are first showing will need ten to fourteen days to open their trusses to perfection after retardment. The large plant of *R.* 'Albatross,' so much admired in the Wisley exhibit, needed three weeks of gentle forcing in the fruit house. On the contrary, deciduous Rhododendrons have been retarded in cool-air storage for two months without damage, provided they have sufficiently large balls of soil, or better still are established in tubs, boxes or pots.

While all these preparations were under way, hardy Ferns, Hostas, Meconopsis, etc., by the hundreds were growing in cold frames, all timed to be perfect for the third week in May. Many plants, in particular the Kurume Azaleas, were lifted from the open ground a day or so prior to the Show, having been covered nightly for a fortnight by the duty students as a prevention against the notorious May frosts so prevalent in the Wisley district.

Not until a week previous was it evident that the timing of the plants would be perfect. It only remained to transport them safely to Chelsea and to arrange an exhibit worthy of the largest Horticultural Society in the world.

Packing and transporting of the plants is one of the most important and exacting operations. All the skill, patience and hard work experienced in growing and timing the plants can be defeated by bad packing, careless handling, or inadequate transport. The Wisley students were to learn much of this phase of exhibiting before the thousands of plants were successfully staged.

Meanwhile the obelisk had been encased in bark and made to resemble a wind-blasted tree. The boxes and 60 tons of peat to form the hill were in position. A path had been planned running from the Chelsea Hospital end of the tent and rising sharply to skirt the huge tree on the left, there to divide, one fork running to the left and the

other to the right, each giving a sloping grass vista to the tree. This arrangement of paths provided a triangular section 44 feet wide and 42 feet to the vertex, immediately facing the main extrance to the marquee.

The exhibit was divided into four informal gardens, arranged in such a manner as to prevent more than one being seen at a time. The main triangular frontispiece had shades of orange, yellow, red and crimson predominating, with drifts of blue Meconopsis and batches of 4-foot *Primula helodoxa*. Rhododendron 'Lady Bessborough' with its cream flowers and the orange 'Jalisco' had important positions, but the dwarf-growing 'Elizabeth' F.C.C. var., raised by the late LORD ABERCONWAY, was the most prominent of all. A neat plant 1½ foot high and 3 feet in diameter, smothered with hundreds of true red blooms nestled in the immediate centre of this group and it was surely a gem of gems, worthy of its exalted position (Fig. 84).

Scores of spikes of 'Bellingham Hybrid' Lilies gave great dignity to this garden. Tall (some 10 feet high) graceful and light, their pale yellow to orange spotted flowers blended ideally with both the more intense colours and the paler ones. Groups of dark mahogany-coloured Lilium 'Dunkirk' and elegant *L. canadense* stood out in the foreground while further back *L. umbellatum* and *L.* 'Maxwill' were interplanted with the cream and yellow of Rhododendron 'Moonshine' crosses and other yellow Wisley hybrids. A few old Silver Birches and plenty of Ferns together with a surround of acid-loving plants and choice Primulas completed a popular and pleasing spectacle from the main entrance to the marquee.

Good as this garden was the majority of the lady visitors to the Show agreed it was surpassed by the pink, white and mauve to purple arrangement which formed the second garden. Right in the background, but not obscuring the huge "tree trunk," was a tall Rhododendron 'Albatross' and near by the light-sprayed deciduous *R. Vaseyi*. Clumps of Enkianthus, Wisley Rhododendron hybrids in soft salmon-pink shades, *R.* 'Lady Rosebery,' *R.* 'Naomi' and the species *R. yakusimanum*, and *R. Schlippenbachii* formed a lovely setting. *Meconopsis betonicifolia*, Primulas including *alpicola*, *pulverulenta* 'Bartley Strain,' and *Viali* together with fine *Lilium regale*, *L. centifolium* and Wisley Hybrids blended together perfectly.

Directly opposite, on the other side, a mossy bank mounted steeply to the base of the "tree." This was planted with fine specimens of the tangerine-orange Rhododendron 'Fabia,' the clear yellow of *R.* 'Hawk' and several unnamed yellow hybrids interplanted with *Lilium Hansoni* and *L. Szovitsianum*, above a ground cover of Hostas and hardy Ferns. Here too was the yellow-spotted Lilium 'Marlyn Ross,' which was sent for trial at Wisley from New Zealand and was given an Award of Merit at the Show.

The fourth portion in many respects contained the most interesting plants, especially to the connoisseur of the rare and the difficult.

Occupying a corner site extending 20 feet each way was a peat bed planted with hundreds of Primulas, Meconopsis, dwarf Rhododendrons, Pieris, Gaultherias, Menziesias, Vacciniums and other acid-loving plants. High up at the back was a group of the small-flowered *Rhododendron artosquameum*, a member of the Triflorum Series. Fine spikes of 'Bellingham Hybrid' Lilies showed to perfection against the brown bark of the "tree." At one end of this arrangement was a dell planted with hardy Ferns interspersed with *Lilium Martagon album* and *Primula rosea* at its lowest edge.

A surround of clean turf made a fine setting for this outstanding exhibit which was the pride of the Wisley students and staff, and fully repaid them for the hard work of the past weeks.

A PLANT HUNTING HOLIDAY IN THE ALPS

Patrick M. Synge

(*Lecture given on January* 20, 1953, SIR GILES LODER, BT., *in the Chair*)

MY visits to the mountains in search of flowers are among my most treasured memories and I hope to repeat them many times again. The scenery and flora of the Alps are so rich and varied, the hospitality and welcome of the hoteliers so excellent, the freshness and crispness of the air such a tonic after work in a London office that there can be few holidays to compare with it.

For Alpine flowers it is best to take an early summer holiday ranging from early June till the end of July, but as one goes higher the season of flowering becomes later, while in September the Colchicums and other autumn flowers will sprinkle the grass with colour. One never ceases to wonder at the prodigality of the flowers which cover the ground in a carpet of brilliant colour and seem to live and flower more abundantly for their environment. Their adaptation to their environment is as extreme as in any other range of plants. The characteristics with which they have to contend are the strong wind against which no big tree could stand and the very short growing and flowering season during which the ground is free from snow.

During the long winter they rest dormant below the snow and little harm comes to them. The buds are ready formed before the snow melts and then in a few days from the melting of the snow they come into flower as the warmth unfreezes the ground and the melting snow provides moisture. Often the flowers come up through the snow melting, possibly by the warmth of their own growth, a hole through which the flower appears. This is especially true of the Crocuses in the very early spring and the delicate little Soldanellas. Many Alpine plants have been found to possess an extra strong concentration of sugars in their cell sap and this assists them both to survive the low temperature

of winter and then to exert an extra strong osmotic tension through which water is drawn into the cells. Perhaps this is their most important physiological adaptation. Their anatomical adaptations are just as important. Their plant body is reduced to a minimum, sometimes no more than a tussock cushion clinging to the sides of the rocks while the root is very long and tough creeping between the crevices of the rock, sometimes even enlarging and cracking the rocks as the name Saxifrage bears witness. Saxifrage in Latin means rock-breaker. Often a plant under an inch in height will have a root system several feet in length. The minimum of resistance is presented to the wind by the plant body while the maximum of anchorage is given by the root. Then the wind is used by the plants in their distribution of seed. A very large proportion of alpine plants have seeds that are adapted for distribution by wind. They may have long feather-like appendages like the Anemone or little miniature parachutes like the Dandelion and other Composites and these may travel long distances. Then a very large number of seeds are produced in one seed head so that a few at any rate may find suitable resting places as opposed to the many which may settle on bare rock or other places where they cannot germinate. Every species of alpine plant is adapted to its own particular little micro-habitat and plant association and it is very rare indeed to find a plant growing out of its environment, be it meadow or scree or rock crevice.

The intensity of colouring among alpine plants is noticeable to every visitor. There is no blue so shattering in its brightness and suddenness, so indescribable in its brilliance as that of the little Vernal Gentian. It is stronger than any man-made colour, while the blue of the little Eritrichium, the King of the Alps, is the very quintessence of the bluest of all skies, the sky of a summer evening when the sun is fast setting.

My earliest alpine trips were to the French Savoy Alps and to the great lake on the Col du Mont Cenis. There are few richer regions for flowers in the whole mountains. Now the border between Italy and France has been moved and since the demise of MUSSOLINI it is no longer necessary for the keen plant collector to dodge the troops holding firing practice across the screes where such rare treasures as *Viola cenisia* and *Campanula cenisia* grow. However, it was near Mt. Cenis that I found my first Eritrichium, a whole mass of it covering large, loose boulders, after wandering almost lost for some hours in a fitful mist. It was well worth it, as every reader of FARRER'S ecstatic description in his charming book *Among the Hills* will know. No visitor to the Alps should be long without this, although I must confess that I have never yet had the opportunity to follow him down to the Maritime Alps in search of the 'King of Saxifrages.'

Our other Alpine visits have been to the mountains of the Bernese Oberland. Here the approach is easy. From Interlaken there are trains and cog railways and fast coaches with musical horns to take one even

up to the great glaciers running down from the Jungfrau. We stayed one pleasant summer at the great hotel of the Kleine Scheidegg and looked out each morning and evening on to the great lap of the Jungfrau or from the ridge behind on to the frowning north faces of the Eiger and the Monch. It was a particularly early season and the fields of Crocuses were over but must have been magnificent in the first weeks of June. On the slopes up to the hotel were still, however, the rounded globes of *Anemone vernalis*, that most beautiful of all Windflowers, a name still most appropriate to them although the derivation of Anemone is much disputed. Some authorities also now separate this group into a distinct genus, *Pulsatilla*. Imagine an opal, the size of a hen's egg rising out of a furry silvery cup and you have some kind of a picture of this beautiful Anemone, which opens to reveal the yellowest of poached egg centres. It is also a much easier plant to collect and to grow in English gardens than the *A. alpina*. A little later come the great flowers of *A. alpina*, a plant that occurs either in the white or the sulphur yellow form practically all over the Alps. It has a double season of beauty for the flowers are followed by whirling, tousled silvery heads of 'Struwelpeter' seeds, perfectly adapted for distribution over long distances by the winds of the Alps. Perhaps this is one reason why it is so widespread and seemingly successful. Another may be its long almost wooden root which anchors it so firmly and is such a brute for the plant collector. He should be warned not to try to collect old-established plants unless he is prepared to take a pickaxe and settle down to several hours' work. Even then he will probably not succeed in getting them up without breaking them or getting them to grow in his garden. Far better is it to take seed or young seedlings. Root cuttings can also sometimes be induced to grow. But alas! this seemingly abundant and easy growing plant in the Alps does not seem to grow with the same ease and vigour in English gardens, particularly in the South, and I have never seen in England such a clump as FARRER describes in his Yorkshire garden of Ingleborough. Nor have I ever seen such a plant shown at any of the R.H.S. spring shows by either nurseryman or amateur. There is, however, so much of the Anemone that there is no need to discourage experimenters from collecting it, but I would strongly discourage anyone from collecting such a difficult rarity as the glorious Eritrichium.

The Alpine flora is so rich and extensive and so interesting that any account trying to mention even the majority of the commoner plants would fill no small book and so, in this brief article, I must confine myself to describing the main alpine zones and some of the plants which have particularly excited me in each. Alpine plants, although often very abundant locally, seem usually to be confined to one environment in the mountains and one seldom finds them outside their particular zone.

It has always been somewhat of a mystery also why some plants are only found in a very few places in the Alps and are consequently

called rare, but in those particular localities they are often abundant, occasionally even the dominant plant, and give every appearance of success and vigour, yet for some reason they have never spread further afield and sometimes these localities may be widely separated by large intervening areas which seem, according to the naked eye, equally suitable for the growth of our rarity. Eritrichium is a good example of this. Another is the rare *Cortusa Matthioli*, found at Mt. Cenis but not at many other places in the Savoy Alps.

Many climbers pass as quickly as possible through the woodland zones, but to me they offer some of the most attractive parts of the mountains and the perfect contrast to a day among the eternal snows. The hardwood trees, Beeches and Oaks and Rowans, seldom reach above 4,000 feet and this is usually described as the sub-alpine zone. But in the early spring this zone contains some of the most beautiful of plants particularly in the glades where a clearing may bring extra light. In the very early spring there will be Hellebores, varying forms of the great white Christmas Rose, *H. niger*, but often tinted with delightful shades of pink and maroon on the outside of the petals. Here also grow the Hepaticas, little Anemones with trilobed leaves, predominantly sky-blue but again varying from white to deeper shades of blue and mauve with even an occasional pink. It is worth selecting the best forms when they are in flower. We were once lucky enough to find a great abundance of these and the Hellebores growing and flowering in early April practically down to the lake level among the hills around the lake of Como. Higher up they will flower rather later. In the same area we also found the round-leafed *Cyclamen europaeum*, at this spring season only betrayed by its leaves carrying a promise of rosy pink flowers to come in plenty in the autumn. It is the finest scented of all the Cyclamen and a valuable species as a garden plant, although curiously requiring rather a more protected position than the more southerly Italian *C. neapolitanum* which grows around Naples and southwards. In cold gardens the corms should be tucked in under a low-growing shrub or a rock.

Later these hills will be parched and brown but as we move upwards into the mountains proper there nearly always seems to be ample moisture and luscious greenness everywhere. No meadows are so bright and full of colour as the Alpine ones. The terrestrial Orchids are also among the glories of the woodland and lower meadow zones. Among Beechwood primarily and on the chalk the very lucky traveller may happen on Venus's Slipper, the nodding, wide-winged flowers of *Cypripedium calceolus* with their ochreous-yellow pouch and brown winged petals. This is a rarity indeed and if found should be photographed with care but not collected. In Switzerland it is very rightly preserved by law and should be spared in other countries. If you want to establish a clump in your garden—and it is not very easily established—it is better to buy a plant in a pot from one of the English alpine nurserymen who specialize in such plants.

The spotted purple Orchids are largely plants of the damper meadow and in some places are very abundant as well as being very variable. Again they do not transplant very well but this can sometimes be managed if care is taken not to damage the young tuber growing from the old one. This is the part from which next year's flower and leaves will come. Among my favourite Alpine Orchids are the little round deep crimson heads of the Vanilla Orchid, *Nigritella nigra*, and the sweet-scented pale lilac mauve spikes of the *Gymnadenia odoratissima* and *G. conopsea*. These are, however, rather dwellers in the higher alpine pastures where often they are very abundant and they seem to be spread like the alpine Anemones all over the Alps.

The woodland zone and glade are also the home of the Martagon Lily, great spikes of nodding turkscap purple Lilies, sometimes from old bulbs growing 5 feet in height and bearing a very great number of flowers. In the Savoy, and I believe in the Maritime Alps, one will find the upturned and brilliant fiery orange cup-shaped flowers of *Lilium bulbiferum croceum*. Both these and the *Martagon* are good growers in English gardens but rather than collected should be bought from a bulb merchant or raised from seed.

The wild Clematis of the Alps, *Atragine alpina*, with its beautiful nodding soft grey flowers is often found here rambling over the rocks and through the undergrowth. The flowers are small in comparison with the soup plate Clematis of gardens, also beautiful in their own way, but they have delicacy and grace which is very pleasing. We found them again on the Mt. Cenis pass, scrambling over the very curious limestone potholes which abound near the edge of the lake there. This is indeed a rich region for alpine flowers.

The alpine meadow which is scythed with such care and skill in the summer, gives us a picture in early June that is unrivalled for colour by any meadow that one may see in England. Here Nature has achieved such a skilful blending of colours as is found in few herbaceous borders. The deep blues and mauves and even magentas of the variable *Geranium pratense* contrast with the yellow Trollius, if the meadow be a damp one, and sometimes also with masses of dwarf poeticus white Narcissus. They are without the very strong sweet scent of the Tazetta Narcissus of the Mediterranean and North African meadows but still not really lacking in that quality.

I remember very well one particular meadow which was thick with white poeticus Narcissus and purple spotted Orchids, a most delightful combination which I can most strongly recommend to anyone having a small damp meadow which is perhaps cut for hay but not grazed. It would only be likely to be successful in damp ground and it is possible that in this country the Narcissus might sometimes flower before the Orchid. The golden Trollius would also grow well under the same conditions.

In drier places—but remember few meadows in the Alps are really dry for long with the water draining down from above at the melting of the snows—often grow masses of the mauve *Salvia pratense* and

Colour Photo, J. E. Downward

FIG. 84—CHELSEA SHOW, 1953. Part of the exhibit from the R.H.S. Gardens, Wisley, including Rhododendron 'Jalisco', Rhododendron 'Elizabeth', Rhododendron 'Moonshine', *Meconopsis betonicifolia*, Rhododendron 'Lady Bessborough', *Primula helodoxa*, Lilium 'Dunkirk', Lilium 'Bellingham hybrids', Rhododendron 'Romany Chai', Lilium 'Shuksan', Rhododendron 'Moonshine'

CHELSEA SHOW, 1953

FIG. 85—H.M. QUEEN ELIZABETH, the Queen Mother, with THE HON. DAVID BOWES-LYON at Chelsea Show, 1953. Behind them is THE PRINCESS MARGARET

Fox Photos Ltd.

FIG. 86—Part of the exhibit from The Commissioners of Crown Lands, Windsor Great Park

Photo, Keystone Press Agency Ltd.

Photo, Water Life and Aquaria World

FIG. 87—Gold Medal Rock Garden exhibited by MR. GEORGE G. WHITELEGG

Photo, The "Topical" Press Agency Ltd.

CHELSEA SHOW, 1953

FIG. 88—Gold Medal Semi-Formal Garden exhibited by MESSRS. RALPH HANCOCK AND SONS

FIG. 89—*Billbergia venezuelana* growing at the Montreal Botanical Garden
(See p. 291)

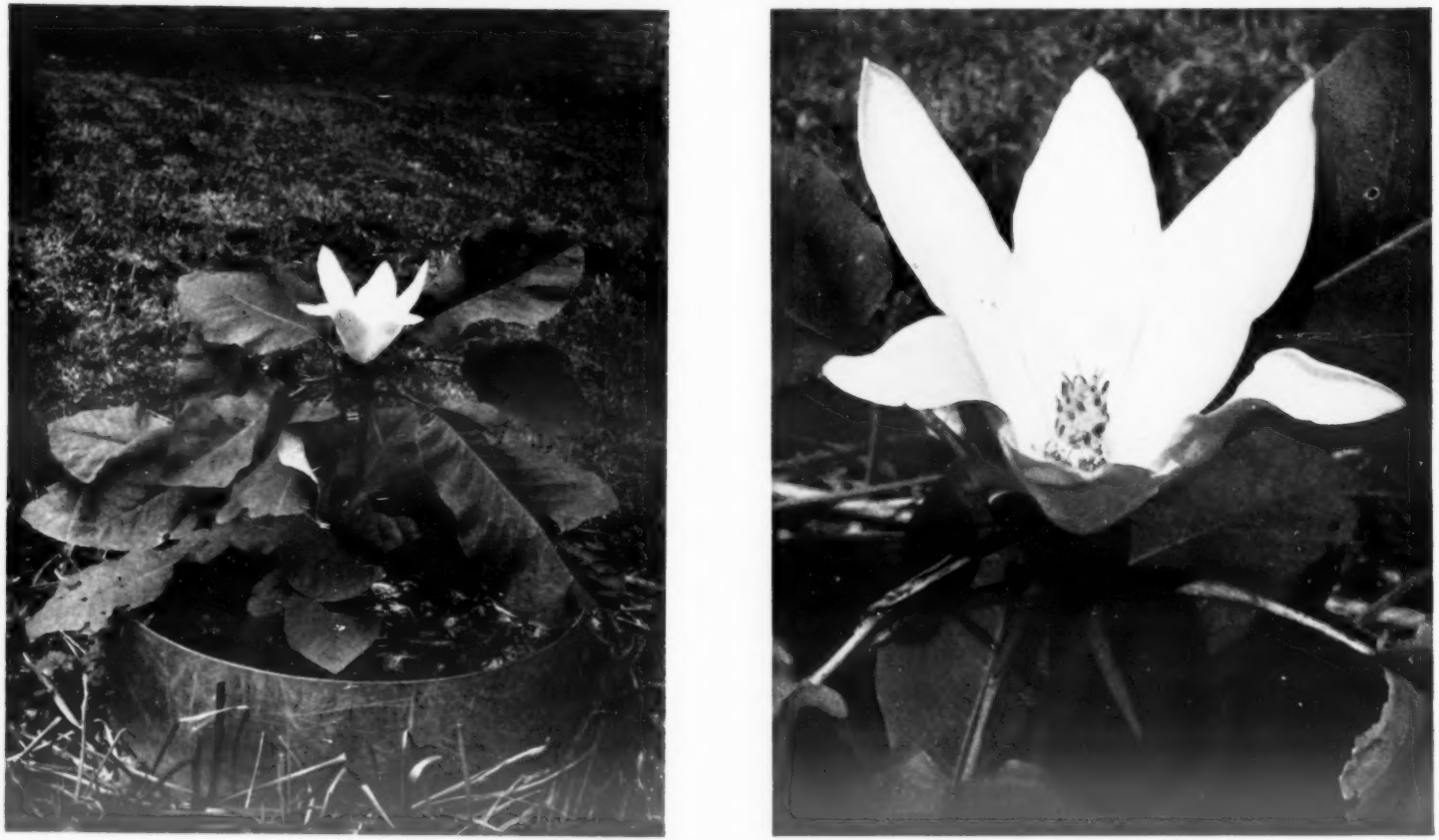
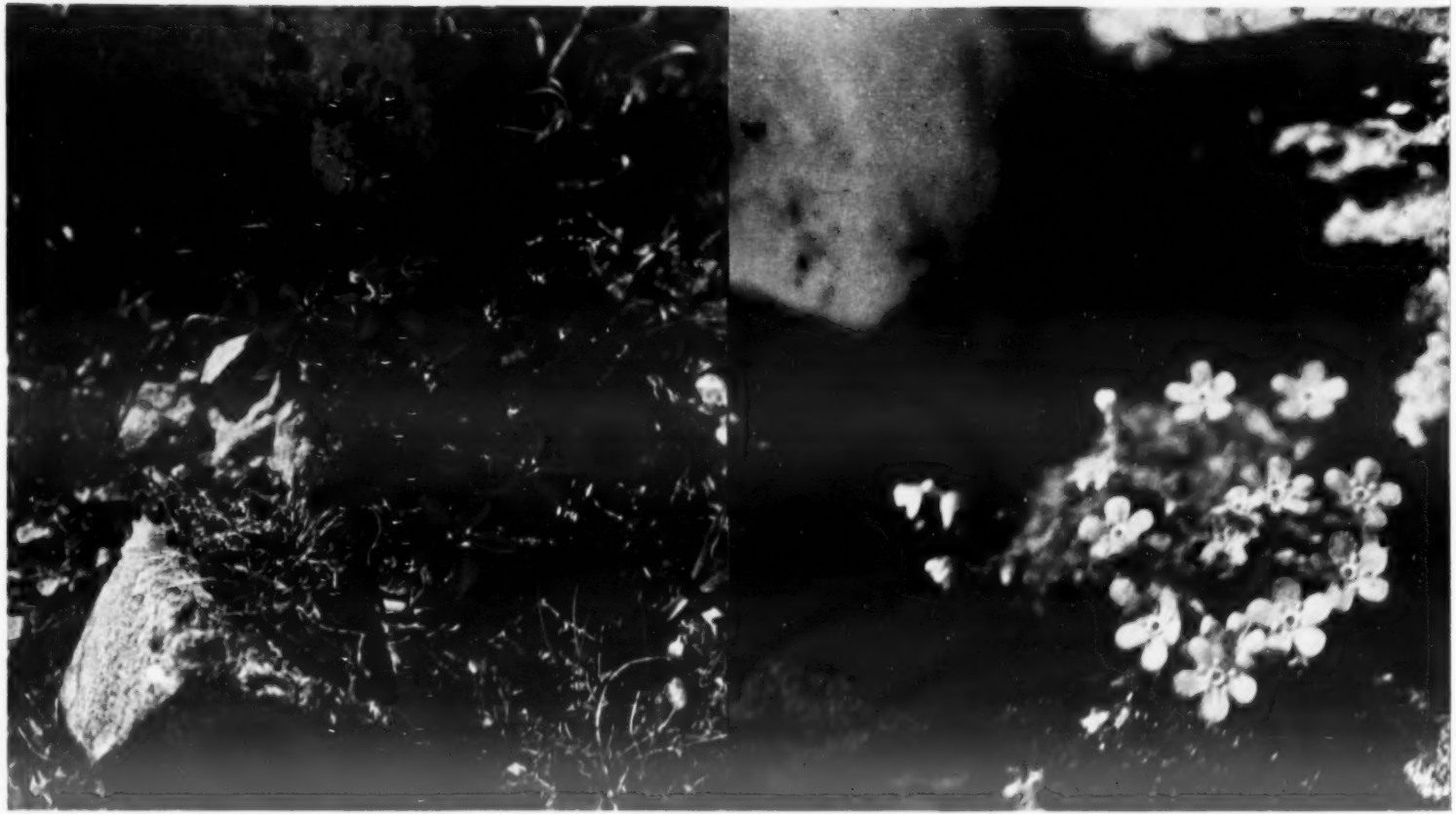


FIG. 90—*Magnolia Ashei*, a native of Florida, flowers at an early age in a Cornish Garden (See p. 288)

A PLANT HUNTING HOLIDAY IN THE ALPS

FIG. 91 — *Androsace alpina* in the Savoy Alps (See p. 286)

Photo, P. M. Synge



Colour Photos, P. M. Synge

A PLANT HUNTING HOLIDAY IN THE ALPS

FIG. 92—*Gentiana verna* (left) and *Eritrichium nanum* (right)

with it one can sometimes find the delicate white St. Bruno's Lily, *Paradisia Liliastrum* or even smaller St. Bernard's Lily, *Anthericum Liliago*, both like a miniature and much frailer Madonna Lily. Here also and at the edges of the forests or in sunlit glades in the forest are to be found the great pleated leaves of the Veratrum, *V. viride*, and the big yellow Gentians, *G. lutea* and *G. punctata*, in both cases much more decorative in leaf than in flower. For this quality the Veratrum is well worth growing in English gardens although one rarely sees it. In the spring it comes through the soil with an exciting vigour like an Eremurus.

As one ascends higher every little rocky outcrop becomes a natural rock garden while the turf is often sprinkled so freely with Gentians and other flowers as to present great masses of colour, even visible as such from quite a distance. This is particularly true of such places in the Savoy Alps as Mt. Cenis or the Col du Lautaret, in each of which one can walk from one's hotel straight out into this wonderful display. At Mt. Cenis the yellow Helianthemum grows by the acre and mingles with the pink *Ononis cenisia* to colour the upper meadows, while on the rocks grow mats of *Dryas octopetala* with its white star-shaped flowers and yellow centre, not perhaps individually as beautiful or as large as the *Anemone vernalis*, but very lovely blowing in the wind by the thousand. There is nearly always a wind and this is the alpine photographer's greatest difficulty. I have recently come to the conclusion that in most cases a quick, short exposure and a moderate aperture is better than a very small aperture with consequently longer exposure even though this may give one a rather shorter depth of focus. A focusing screen and a double extension and a tripod with a swivelling head must be regarded as essentials and I have yet to find the tripod which is stout enough to be any use which is not an awkward inhabitant of one's rucksack, sticking at intervals into one's back, however carefully padded. The coloured Ektachrome film has given me wonderful transparencies with no more trouble than the use of an ordinary panchromatic roll film and the exposure can be nearly as quick. One only wishes it could be more freely obtainable in this country.

Photography is also an excellent excuse for resting and to my mind to enjoy the mountains to the full one should pause at intervals and savour the scene around. Also many of the best flowers are found a little off the main paths and tracks. However, that is a diversion from the plants. Where the snow has just melted and sometimes even coming up through the snow and although the grass may still be quite brown one sees some of the most lovely masses of flowers in the Alps, fields of white and pale mauve Crocuses, more delicate than their garden descendants, banks of nodding Soldanellas constantly seeming to blow in the wind and finest of all enormous expanses of white Ranunculus, *R. pyrenaeus*, and larger in flower but dwarfer in habit *R. amplexicaulis*, both infinitely variable in form and like the snowiest of dwarf Buttercups carpeting the ground with a sprinkling of very purest white,

even seeming whiter than the patches of snow which have so recently melted to bring them back to flower. Higher again, generally among the rocks and in damp places, one finds perhaps the most interesting Buttercup of all, the *R. glacialis*, with its large clusters of white pink-tinged flowers with brilliant golden centres and fine, almost fernlike and slightly succulent, leaves. It is reported as growing even near the summit of the 14,000 feet Finsteraarhorn, but can also be found as low as 7000–8000 feet. Unfortunately, this is another plant which it is difficult to grow satisfactorily in this country, although good examples have been shown from time to time.

In the higher zones above the meadows many of the most interesting plants are found on the damp north-facing rocks at the foot of mountain cliffs or on the screes which to the casual observer seem to consist of nothing but little stones which move so alarmingly under his feet.

On the damp rock faces are often to be found choice Primulas and sometimes Androsaces, the deep mauve purples of *P. viscosa* and the *P. pedemontana*, a local plant of great beauty with clusters of pinkish-purple flowers, each with a white eye and a little russet furry edge to the leaf which makes it easy to recognize. It may be found around Mt. Cenis. Here also will be the hanging mats of *Saxifraga oppositifolia*, deep glowing stars of rich purple, shining against the dark rock. It is also sometimes a plant of the screes, where it makes roots often to be measured by yards rather than by feet. Another plant distributed likewise all over the Alps and generally to be found in the same environment of loose scree is the Alpine Toadflax, *Linaria alpina*, with masses of little mauve and orange flowers well set off by the blue-grey foliage. It does not, however, transplant well, and is rarely seen in English gardens. It may, however, be treated as an annual, the seed being sown directly into a scree.

In this environment of scree and shale may sometimes also be found two of the choicest of the alpine Campanulas, *C. cenisia* with powder blue upright and wide open bells tending sometimes to be tinged with a slaty grey, almost sessile on to the small rosette of leaves and *C. Allionii* with rather large mauve or purple flowers like a miniature Canterbury Bell. At the Mt. Cenis *C. cenisia* seem to grow freely in the shale of an old road just under the towering rocks and permanent snows and almost hides itself by mimicry among the grey stones. With it grows another great beauty *Viola cenisia*, which must surely rank as one of the most lovely Violas in the world, large perky flowers of a delicate pale pinkish-mauve looking straight up at one and marked as with a yellow mouth and moustache in sharp lines of deep purple. Like the Campanula the roots of this run widely around the scree and it is also a difficult plant to grow satisfactorily in England or even to transport there. It is perhaps for this reason that one enjoys so much seeing it in its natural habitat. At this altitude also one finds the Androsaces and the cushion ones are exciting plants, generally inhabitants of damp shale, such as the pale shell-pink *A. alpina* (Fig. 91) or damp north facing and vertical rock

crevices such as the pure white *A. helvetica* or *A. pyrenaica*. Again only small plants should be moved and they are plants for the Alpine house or scree frame where care can be taken not to water them overhead. With them often grow some of the most delicate of the alpine Ferns such as the Finger Fern, *Ceterach officinarum*, each leaflet often being rimmed in silver.

Here also grows the King of the Alps *Eritrichium nanum*, the richest of all clear blue flowers, little compact tuffets of silky grey leaves with sessile Forget-me-not flowers, but of a colour several shades deeper than the usual Forget-me-not. It is certainly a great treasure and again one better left in its natural position for hardly anyone had made a success of it in England, even in the most pampered or the most vigorous of Alpine houses. It is a plant only of the high places and of the granitic and shale formations, but it grows in more sunny and open places than the *Androsace helvetica* often covering boulders of rotten rock and filling every crack. It is especially good in the Savoy Alps both near Le Lautaret and Mt. Cenis.

In collecting alpine plants it is always better to take the seed or seedlings, but in a few cases such as forms of *Ranunculus amplexicaulis* or *pyrenaeus*, these vary so much that it is worth choosing good full flowers from the myriads which one generally sees. Many of the rarer things are better left alone. The easiest and probably the most successful method of collecting is to wash all the soil off the roots, and then wrap them in a tight bundle of sphagnum moss, just slightly damped, and then enclose them in a greaseproof paper or in alkathene film, leaving the top open. I find it is worth buying some sheets of greaseproof paper and a box of rubber bands before setting out and also a packet of seed envelopes. Then quite a reasonable number of plants can be brought home in a small space and will last well for a week or two. It is necessary to obtain licences for import before leaving so as to be sure of passing the Customs safely on return and to make one's plants available for inspection by any representative from the Ministry of Agriculture, who will check that no pests are imported with them. It is generally better not to plant them straight away into the rock garden, but to let them make fresh roots in a closed frame with a compost of damp sand and peat for the first two months or so.

But whether one collects or does not collect or takes one's pleasure in walking or in photographing, such a holiday in the wilder parts of the mountains still remains one of the most fascinating and invigorating of changes for the keen gardener, although humbling in that he must know that he can never hope to obtain in his own garden such effects of colour and mass and perfect positioning for his plants as he sees among the high hills. This short article has only allowed me space to touch on a very few from the great wealth of mountain plants which are so widespread along the Alps. Each year one can see something one has not seen before and one does not quickly tire of seeing the common flowers again, so beautiful is their natural growth and prodigality on the mountains.

NOTES FROM FELLOWS

Magnolia Ashei—WEATHERBY

ON June 7 when away from home I received a telegram from COLONEL A. T. HOLMAN of Chyverton near Truro to tell me that a seedling of *Magnolia Ashei*, which I had given him not very long ago, was in flower. It being nearly midnight before I reached home, I was obliged to wait until to-day, June 8, to go and see the flower; and as I believe this to be the first bloom of this sub-species (if such it be) to open in an English garden a brief description of it together with a history of the plant will be of interest to some readers of the JOURNAL.

A characteristic of *M. Ashei* is said to be the early age at which it develops flowers; it is said to do so when no more than 3 feet high, and I read not long ago the suggestion in an American garden magazine that *M. Ashei* might on this account be used for border edging. The story of the plant I saw to-day shows that this suggestion is not so far off "the target" as I imagined when I read it.

The plant was raised from seed sent to me in 1949 from an authenticated tree in Florida and was given to COLONEL HOLMAN on February 26, 1950, by whom it was planted in a sheltered part of his garden.

On March 22, 1951, the Magnolia was moved to the centre of this little corner of the garden where the sunshine is trapped within the brick wall which surrounds it, the brick seeming to retain something of the warmth imbibed during the heat of the day so that it is always warmer than the rest of the garden.

A year later, May 1952, when the plant was no more than 10 inches high the first flower bud was observed; but this failed to reach maturity being, as described by COLONEL HOLMAN, pushed off by a growth bud on the same shoot.

As with *M. macrophylla*, and also *M. rostrata*, the flower buds of *M. Ashei* cannot be distinguished from growth buds until shortly before opening, but by May 12 of this year it became evident that this plant was again promising to flower, and on June 7 the telegram referred to above was sent off to say that the flower—for there is only one on the "tree"—was starting to unfold from the remarkably pointed bud.

Seen to-day this plant measured 19 inches from the ground to the flower which is terminal on the leading shoot. It is a thoroughly healthy little plant and has a side-shoot growing from near the ground as well as the main stem at the top of which the flower is poised.

The flower is still rather cup-shaped so that the 8 inches which the span measured to-day will when the flower is fully extended make another two (Fig. 90).

The two outer pale green segments (sepals) have already begun to wither, and one of them has been shed: the petals are six in number,

three in each of two whorls, pigeon's egg white and without the purple staining of the base which one would have expected, lanceolate or elliptic lanceolate, those of the outer whorl $5\frac{1}{4}$ inches and $2\frac{1}{4}$ inches across as measured on the flower, those forming the inner whorl being rather shorter and $1\frac{3}{4}$ inch across, the androecium appeared to be green and the stamens white, while the gynoecium was cream coloured and the stigmas a pale brown. The scent of the flower seemed to those who could smell it to resemble that of *M. Wilsonii* though not so strong.

Many seeds or plants of *M. Ashei* were distributed by me—of the former, some to Wisley—and if this note meets with the eye of any of the recipients it will be interesting to hear whether any other plants have flowered. How fantastic the request for this information sounds when it refers to Magnolia seed distributed in 1949! Be this as it may, COLONEL HOLMAN's plant makes it clear that we have now in our gardens another Magnolia of great beauty, as well as one which will put heart into septuagenarian gardeners.

GEORGE H. JOHNSTONE

Asiatic Chestnuts and American Chestnut Blight

American Chestnut Blight, caused by the fungus *Endothia parasitica*, is certainly one of the most damaging tree diseases known. Between 1904, when it was first discovered in New York, and the present day it has destroyed the majority of the Chestnut (*Castanea dentata* Borkh.) in the mixed hardwood forests of the eastern United States. More recently it has spread to Europe, where it is now firmly established in various parts of Italy and in the Tessin province of Switzerland, which fortunately lies wholly south of the main backbone of the Alps. It has been suggested that the European Chestnut (*C. sativa* Mill.) is more resistant to this disease than the American *C. dentata*. That may be the case, but the difference seems to have little practical importance, for the fungus has already done enormous damage to the Chestnuts in the infected areas, where, in general, they are grown for nuts, firewood and tannin rather than for timber.

We must face the possibility that, despite the precautions which are being taken, the disease may eventually reach Great Britain. Chestnuts of British origin are being tested for their susceptibility to the fungus in Italy and in the United States. We have, unfortunately, no reason to believe that they will prove resistant.

It now appears almost certain that the fungus is indigenous to Eastern Asia, where it maintained itself on various Asiatic species of Castanea, which were highly resistant, but not immune, and that it was introduced into America on trees imported from Asia. More recently these Asiatic species have been considered as substitutes for American and European Chestnut in infected areas, and also as breeding parents to be used in the production of resistant hybrids. In hotter climates than ours they have often grown well, though the quality and size of

their nuts, and their eventual size as timber trees seem likely to fall below those of *C. sativa*.

In Great Britain the chief commercial importance of Chestnut is as coppice, so that eventual timber size and nut quality would matter little if growth from coppiced stools was straight and rapid. It is of some importance therefore to know how the Asiatic Chestnuts behave under our conditions. Four species appear to be worthy of consideration, *C. crenata* Sieb. & Zucc. (*C. japonica* Bl.) from Japan, and *C. mollissima* Bl., *C. Henryi* Rehd. & Wils. and *C. Seguinii* Dode from China. Our present information on these trees in Great Britain is very meagre.

The notes given below are based mainly on our experience in the Forestry Commission with a very limited number of introductions, mostly recent; on a personal note from MR. A. J. IVENS of Hillier and Sons, relative to nursery behaviour; on some notes from botanical gardens; and on BEAN's *Trees and Shrubs Hardy in the British Isles*.

C. crenata. This is the only one of the four species under consideration which is noted by IVENS as hardy in the nursery stages. A small batch of plants raised at Oxford before the war was planted in Parkhurst Forest in the rather favourable climate of the Isle of Wight, and has grown quite well, though not as strongly as native Chestnut in the immediate vicinity. More recently a large batch of plants has been successfully raised in a rather exposed nursery at Tulliallan, north of the Firth of Forth, and those are being planted out in various sites for observation. On the other hand, it has not grown particularly well at Kew.

C. mollissima. IVENS reports that this is rather tender in the nursery, and this is borne out by our own experience, for several lots of plants have been killed during fairly normal winters. Recently, however, a number of plants, raised from American seed from plants selected for vigour, have survived two winters. They are being used to form a plot at Bedgebury in Kent. At Kew it is not impressive though BEAN refers to it as being hardy there.

C. Henryi. IVENS reports this also as tender when young, and at Kew according to BEAN it is not doing well. It is said, however, to be growing well at the Edinburgh Botanic Garden. Possibly the tree there may be of an origin more suited to our climate.

C. Seguinii is not mentioned by BEAN. IVENS reports that it is rather tender when young. It seems quite possible that this species has not yet reached any size in Great Britain.

It is hoped that Fellows, and others, who have specimens of any of these Chestnuts growing in their gardens, or know where specimens can be found, will send information, particularly notes on vigour and hardiness, to me at the Forestry Commission Research Station, Alice Holt Lodge, Wrecclesham, Farnham, Surrey. We may then be in a better position to evaluate their possibilities as substitutes for our native Chestnut should Chestnut Blight unfortunately reach our shores.

For those interested I would remark that the disease is briefly described and illustrated in colour in "Chestnut Blight caused by the Fungus *Endothia parasitica*." Forestry Commission Booklet No. 3, 1950.

Chestnuts imported for eating purposes are washed and dried before export. This, it is considered, renders the risk of importing the disease on seed almost negligible. Nevertheless it is not advisable to use imported seed for raising trees, for in that case, if a lucky spore of the fungus did germinate, it would be in a position immediately to infect the surrounding Chestnuts. Home-collected nuts compare poorly for eating, but they produce perfectly good seedlings for forestry purposes. Indeed, since Italian strains of Chestnut have often been selected for nut quality rather than rate of growth, introductions based on seed imported primarily for eating purposes, might well result in trees that were poor timber producers or even climatically unsuited for the British Isles. There is little point in trying to grow Chestnuts for nut production in Great Britain. The English summer is too cool and the Chestnut flowers too late for the nuts to develop to any great size. Indeed it is surprising considering their poor development that such a high percentage of the seed is viable.

T. R. PEACE

Billbergia venezuelana

Not many members of the Bromeliaceae have been mentioned in this JOURNAL. Is it because they are frequently considered strictly as hothouse plants? Actually, many are easy house plants if treated properly, and quite a few of them are very handsome. Whatever may be the reason, it might be appropriate to make an exception with the subject of the present note, which not only is likely to be the most beautiful species of the genus but besides is probably new to cultivation outside of Venezuela. The writer would be much interested to learn from other members of this Society whether *B. venezuelana* has ever been introduced into England, and if so whether it is still in cultivation here. In Venezuela, where the writer collected the plant (Fig. 89) in the late fall of 1951, *B. venezuelana* is one of the few native plants which the natives themselves cherish for its great beauty, and in the north-eastern part of the country, in the state of Aragua—the only place where this species is known to occur— large clumps of it may frequently be seen planted in the low crown of the family Calabash tree (*Crescentia cujete*) in front of the small adobe houses.

When in bloom this species presents a truly spectacular sight, since the over 1-foot long inflorescences, supported by large brilliant pink bracts, develop within a few hours and seem to gush forth as from a fountain head. Each plant readily produces numerous side shoots, so that a large clump will flower on all sides and will produce a unique display. Since *B. venezuelana* occurs on the edge of the coastal

xerophytic zone of vegetation, where precipitation is extremely low from the end of November to early April, it is accustomed to a dry resting period during this time and should then be watered and sprayed only very sparingly. Its new growth usually commences in April and the plants should then be sprayed twice a day. During the growing period it responds very favourably also to a spray once or twice weekly with highly diluted fertilizer, such as dissolved and slightly fermented chicken manure. Its normal flowering time is July–August. The plant illustrated flowered in August 1952 in the greenhouses of the Montreal Botanical Garden.

H. TEUSCHER

Curator of the Montreal Botanical Garden.

Victor Hugo on Nettles

The following extract from *Les Miserables* (Vol. 1, Book V, Chap. 3) may be of interest to those who are untiring in proclaiming that we are not producing the utmost that our land can yield, and of particular interest to those who urge that there are millions of acres of marginal land that can be brought into profitable productivity:—

> "When the nettle is young the leaves make excellent greens; when it grows old it has filaments and fibres like hemp and flax. Cloth made from the nettle is worth as much as that made from hemp. Chopped up, the nettle is good for poultry; pounded, it is good for horned cattle. The seed of the nettle mixed with the fodder of animals gives a lustre to their skin; the root mixed with salt produces a beautiful yellow dye. It makes, moreover, excellent hay as it can be cut twice in a season. And what does the nettle need? Very little soil, no care, no culture, except that the seeds fall as fast as they ripen, and it is difficult to gather them; that is all. If we would take a little pains the nettle would be useful; we neglect it and it becomes harmful. Then we kill it. How much men are like the nettle! My friends, remember this, that there are no bad herbs and no bad men; there are only bad cultivators."

Is all the above just a rich crop springing from the fertile imagination of this great writer, or has any of it, and if so how much of it, been tested and found to be of practical value?

H. B. DRYSDALE WOODCOCK

A NOTE ON POIRET AND TURPIN'S "LEÇONS DE FLORE"

F. Cardew

AMONG the books shown by MR. STEARN at his recent lecture on the Lindley Library was our almost unique copy on vellum of POIRET and TURPIN'S *Leçons de Flore. Cours complet de botanique par J. L. M. Poiret. Suivi d'une Iconographie végétale par P. J. F. Turpin.* 3 vols. 4to. Paris. 1819–20.

The history of this book is intricate and begins actually with that of another work:—CHAUMETON'S *Flore Médicale,*' * F. P. CHAUMETON was born in Touraine in 1775, became an Army doctor, and after service in various hospitals and campaigns, retired early, settled in Paris, and gave himself to writing on scientific subjects. His chief book was the *Flore Médicale*, published in parts in Paris, in 8vo, 4to and folio form, between 1814 and 1818. By the time vol. 2 was published, CHAUMETON was feeling insecure in health, and from vol. 3 onwards the work was produced by him in collaboration with DE CHAMBERET, another distinguished Army doctor who undertook the medical part of the text, and the naturalist POIRET who supplied the descriptions of the plants. TURPIN was already responsible for the great majority of the plates, though some were drawn by the publisher's wife, MME E. PANCKOUCKE. CHAUMETON died in 1819, and by this time the *Flore Médicale* had been completed, A to Z, in six volumes. But POIRET and TURPIN decided to add a seventh supplementary volume, the *Leçons de Flore*—as above. The two works were too long to be issued conveniently as one, and vol. 7 appeared therefore in the *Flore médicale* in two volumes; giving rise to the ambiguous statement of PRITZEL that the work consisted of eight volumes though no volume was numbered "8."

The Lindley Library acquired in the Cory Bequest a fine copy of the de luxe folio edition of this whole work including the supplementary volumes. In this issue the plates are engraved, but coloured by hand by TURPIN.

But the *Leçons* was obviously adapted to a career of its own, and from the beginning the publisher PANCKOUCKE issued it also as an independent work in three volumes and three formats—8vo, 4to and folio—appearing in 17 monthly parts between 1819 and 1820. The 8vo was a subscribers' edition, the 4to limited to 25 copies, and the folio to only 10; the two last being de luxe productions while the 8vo may be described as the "working" edition. The area of letterpress or engraved plate did not exceed $7\frac{1}{2} \times 5$ inches, so that the same set-up could be used for any format, leaving a handsome margin in the 4tos and folios.

* It is referred to by BRUNET as *Flore du Dictionnaire des Sciences Médicales*, as it was apparently adopted as the botanical section of the Dictionnaire; but this is one and the same work.

The Lindley Library owns—again through the Cory Bequest—a complete copy of the 8vo edition. This is particularly valuable as it retains all the paper covers of the original parts, and on the back cover PANCKOUCKE sets forth particulars of the issues described above, with other information which need not be repeated here.

Both the foregoing editions would be a valuable asset to any library but the semi-unique vellum *Leçons de Flore* stands by itself in beauty of workmanship and importance. The text is printed: the plates not engraved, but drawn as well as coloured by hand, by TURPIN.

Naturally the vellum copies are not mentioned by PANCKOUCKE, as they did not concern the public at large. But PRITZEL * says that two complete copies were made of the "8"-volume *Flore Médicale* including the supplementary volumes, and that he had seen one of them in the Imperial Library at Vienna, having been bought by the EMPEROR FRANCIS II of Austria. BRUNET † repeats PRITZEL'S statement as to the existence of two copies, and says that the second was bought by LOUIS XVIII of France. Neither makes any suggestion that the *Leçons de Flore* was printed on vellum independently of the *Flore Médicale*, so it is evident that the Lindley Library copy must have come from one or other of these Royal sets. An enquiry this winter of the Continental Librarians involved has cleared up the matter. For DR. TRENKLER of Vienna has informed us that the vellum copy of the *Flore Médicale* (including the *Leçons*) made for FRANCIS II, is still in the Oesterreichische National Bibliothek (formerly the K.K. Hofbibliothek): and M. PIERRE LEGUAY of Paris tells us that the Bibliothèque Nationale does not possess any part of the vellum *Flore Médicale* bought by LOUIS XVIII.

The Lindley Library vellum *Leçons de Flore* must therefore have come from LOUIS'S set. But a mystery remains:—the whereabouts of the other six volumes of his *Flore Médicale*. MLLE MADIER of the Library of the Muséum Nationale d'Histoire Naturelle in Paris, states that in 1861 the set was still in the Bibliothèque Nationale (then the Bibliothèque Impériale). But its intervening history is lost. The R.H.S. copy of the *Leçons* came into the Lindley Library in the Cory Bequest in 1936, MR. CORY having bought it in 1931 from the London booksellers, Messrs. Sotheran. Before that it had been in the Library of a certain EDWARD HENRY SCOTT, as shown by the book-plates inside the covers, but so far the identity of this gentleman has not been discovered.

It is of some interest that an American bookseller is at present (April 1953)—offering for sale what appears to be the MS. of CHAUMETON'S *Flore Médicale*, with TURPIN'S original drawings for the six volumes. There are no Prefaces, Indexes, Tables of Contents or the like. The MS. came to America from a dealer in Europe, but its earlier history is not known to the present owner.

* PRITZEL, *Thesaurus*. 1851, no 1811.
† BRUNET. *Manuel*, tome I, under CHAUMETON.

WISLEY TRIALS

NARCISSI (1950–53)

The Narcissus trial is conducted on a three-yearly basis. Thus during the summer of 1950 the bulbs from the old trial were lifted after having been in the ground for three years and 25 single nosed round bulbs of each stock were set aside for further planting. Before being planted these bulbs, together with the bulbs of the new varieties received for trial, were given the warm water treatment—immersion for three hours at a temperature of 110° F. The aim of this treatment is to control the attacks of the Narcissus eelworm, *Ditylenchus dipsaci*, of the large Narcissus fly, *Merodon equestris* and of the small Narcissus fly, *Eumurus species*. During May and June the trial was dusted with 5 per cent. B.H.C. dust as a further control against the large Narcissus fly.

Twenty-five bulbs of each of the one hundred and forty-six stocks were planted in the early autumn of 1950. The date on which each variety opened its first flowers and the number of flowers produced each year was recorded and is given in the descriptions published below. During 1952 and 1953 there was evidence of considerable Narcissus Mosaic Virus and certain complete stocks and bulbs had to be removed and destroyed.

The trial is inspected in the second and third years of growth by a sub-committee of the Narcissus and Tulip Committee. The sub-committee visited Wisley on April 10, 21 and 30, 1952, and their recommendations for 1952 are published in the R.H.S. JOURNAL **77**, pages 336 *et seq.* The sub-committee visited Wisley on April 8, 16 and 23, 1953, and their recommendations are given below.

The number in brackets after the description of the variety is that under which it was grown in the trial.

Division I—Trumpet Narcissi

(a) Perianth coloured; Corona coloured, not paler than the Perianth

HUNTER'S MOON. (Raised by the late Brodie of Brodie, introduced and sent by Mr. Guy L. Wilson, The Knockan, Broughshane, Co. Antrim, Northern Ireland.) **A.M.** April 16, 1953.—Vigorous, erect foliage, 14–16 inches long. Flower stems 16 inches tall. Flowers of good form, 4 inches in diameter; perianth segments $1\frac{3}{4}$ inch long, flat, overlapping for half their length, Mimosa Yellow (H.C.C. 602/1); corona $1\frac{3}{4}$ inch long, mouth expanded and frilled with margin slightly crenate, Sulphur Yellow (H.C.C. 1/1). Flowering from April 2, 1953. Flowers in the first year 23, in the second 38, in the third 107. [17.]

(c) Perianth white; Corona white, not paler than Perianth

SAMITE. (Raised, introduced and sent by Mr. Guy L. Wilson.) **A.M.** April 23, 1953.—Described R.H.S. JOURNAL **77**, page 337 (**H.C.** 1952). Flowers in the third year 112. [34]

Division II—Large Cupped Narcissi

(a) Perianth coloured; Corona coloured, not paler than the Perianth

ADAMANT. (Raised by the late J. C. Williams, introduced and sent by Messrs. Barr & Sons, 11–13 King Street, Covent Garden, London, W.C.2.) **F.C.C.** April 8, 1953.—Described R.H.S. JOURNAL **77**, page 337 (**A.M.** 1952). Flowers in the third year 137. [64]

BROADWATER. (Raised, introduced and sent by Colonel F. C. Stern, O.B.E., M.C., F.L.S., V.M.H., Highdown, Goring-by-Sea, Sussex.) **F.C.C.** April 23, 1953.—Described R.H.S. JOURNAL **77,** page 337 (**A.M.** 1952). Flowers in the third year 125. [67]

ORANGE CREST. (Raised by Mr. J. L. Richardson, Prospect House, Waterford, introduced and sent by Messrs. Barr & Sons.) **A.M.** April 16, 1953.—Vigorous, foliage mostly erect but some lax, 18 inches long. Flower stems 18 inches tall. Flowers of good form, 4 inches in diameter; perianth segments $1\frac{3}{4}$ inch long, flat, with margins slightly incurving, overlapping for half their length, Sulphur Yellow (H.C.C. 1/2); corona $\frac{3}{4}$ inch long, mouth expanded, frilled, margins crenate, Aureolin (H.C.C. 3) deepening at mouth to Tangerine Orange (H.C.C. 9). Flowering from April 9, 1953. Flowers in the first year 25, in the second 74, in the third 147. [65]

RED SPLENDOUR. (Raised, introduced and sent by Messrs. R. H. Bath, Ltd., The Floral Farms, Wisbech, Cambs.) **A.M.** April 16, 1953.—Vigorous, foliage erect, some lax, 18–20 inches long. Flower stems 18 inches tall. Flowers of good form, 4 inches in diameter; perianth segments $1\frac{3}{4}$ inch long, flat, overlapping for half their length, Mimosa Yellow (H.C.C. 602); corona $\frac{3}{4}$ inch long, mouth expanded, frilled, margins serrated, Orpiment Orange (H.C.C. 10). Flowering from April 9, 1953. Flowers in the first year 36, in the second 42, in the third 125. [58]

STOUT LAD. (Raised, introduced and sent by Mr. Guy L. Wilson.) **A.M.** April 23, 1953.—Vigorous, foliage erect, 18 inches long. Flowers of good form, $3\frac{3}{4}$ inches in diameter; perianth segments $1\frac{1}{2}$ inch long, flat, with margins slightly incurving, overlapping for half their length, Primrose Yellow (H.C.C. 601/1); corona $\frac{9}{16}$ inch long, mouth slightly expanded, frilled, margins slightly reflexed and serrated, Lemon Yellow (H.C.C. 4). Flowering from April 15, 1953. Flowers in the first year 27, in the second 70, in the third 132. [55]

(b) Perianth white; Corona coloured

PENVOSE. (Raised by the late P. D. Williams, sent by Messrs. Barr & Sons.) **F.C.C.** April 16, 1953.—Described R.H.S. JOURNAL **77,** page 338 (**A.M.** 1952). Flowers in the third year 87. [100]

CHARLOTTE BRIDLE. (Raised, introduced and sent by Mrs. F. E. W. Hanger, R.H.S. Gardens, Wisley, Ripley, Woking, Surrey.) **A.M.** April 16, 1953.—Vigorous, foliage very erect, 20 inches long. Flower stems 20 inches tall. Flowers of good form, 4 inches in diameter; perianth segments $1\frac{1}{2}$ inch long, flat, margins slightly incurving, overlapping for half their length, a creamy white near Chartreuse Green (H.C.C. 663/3); corona $1\frac{1}{4}$ inch long, much ribbed, mouth much expanded, frilled, with margins serrated and crenate, Mimosa Yellow (H.C.C. 602/1) deepening at mouth to Mimosa Yellow (H.C.C. 602). Flowering from April 9, 1953. Flowers in the first year 34, in the second 51, in the third 87. [102]

ELLESMERE. (Raised by the late P. D. Williams, introduced and sent by Messrs. Barr & Sons.) **A.M.** April 23, 1953.—Vigorous, foliage mostly erect, some lax, 16–18 inches long. Flower stems 18–19 inches tall. Flowers of good form, $3\frac{1}{2}$ inches in diameter; perianth segments $1\frac{1}{2}$ inch long, flat, margins incurving giving a pointed star-shaped appearance, Primrose Yellow (H.C.C. 601/2), margins Dresden Yellow (H.C.C. 64/2); corona $\frac{3}{5}$ inch long, ribbed, mouth much expanded, frilled, margins serrated, at base Lemon Yellow (H.C.C. 4/1) deepening at mouth to near

Orpiment Orange (H.C.C. 10). Flowering from April 16, 1953. Flowers in first year 26, in the second 68, in the third 167. [62]

FAREWELL. (Raised, introduced and sent by M. P. Williams, Esq., Lanarth, St. Keverne, Cornwall.) **A.M.** April 23, 1953.—Described R.H.S. JOURNAL **75**, page 332 (**H.C.** 1950). Flowering from April 13, 1953. Flowers in the first year 40, in the second year 76. [149]

ROSELENE. (Raised, introduced and sent by Mr. F. E. W. Hanger, R.H.S. Gardens, Wisley, Ripley, Woking, Surrey.) **A.M.** April 23, 1953.—Described R.H.S. JOURNAL **74**, page 467 (**H.C.** 1949). Flowering from April 11, 1953. Flowers in the first year 34, in the second 47, in the third 113. [85]

STADIUM. (Raised by Mr. J. L. Richardson, introduced and sent by Messrs. Barr & Sons.) **A.M.** April 8, 1953.—Vigorous, foliage erect, 16–18 inches long. Flower stems 14 inches tall. Flowers of good form, 4½ inches in diameter; perianth segments 1⅝ inch long, flat, margins slightly incurving, overlapping for half their length, Chartreuse Green (H.C.C. 663/3); corona 1⅜ inch long, slightly ribbed, mouth much expanded, frilled with margins deeply serrated and slightly reflexed, Canary Yellow (H.C.C. 2/1). Flowering from April 2, 1953. Flowers in the first year 23, in the second 37, in the third 63. [101]

(c) Perianth white; Corona white, not paler than the Perianth

DUNLEWEY. (Raised, introduced and sent by Mr. Guy L. Wilson.) **A.M.** April 23, 1953.—Described R.H.S. JOURNAL **77**, page 339 (**H.C.** 1952). Flowers in the third year 136. [108]

Division III—Small-cupped Narcissi

(b) Perianth white; Corona coloured

ST. LOUIS. (Raised and introduced by Messrs. R. Rijnfeld & Son, Holland, sent by Messrs. Barr & Sons.) **F.C.C.** April 23, 1953.—Described R.H.S. JOURNAL **77**, page 339. (**A.M.** 1952). Flowers in the third year 100. [120]

Division VIII—Tazetta Narcissi

MARTHA WASHINGTON. (Introduced and sent by Messrs. R. H. Bath, Ltd.) **A.M.** April 23, 1953.—Vigorous, foliage spreading, 20 inches long. Flower stems 21–23 inches tall, bearing 2–3 flowers per stem. Flowers of good form, 3¼ inches in diameter; perianth segments 1½ inch long, slightly twisted, overlapping for two-thirds of their length, white; corona ½ inch long, ribbed, mouth straight and frilled, margins slightly serrated, at extreme base Buttercup Yellow (H.C.C. 5/1) changing at mouth to Orpiment Orange (H.C.C. 10). Flowering from April 18, 1953. Flowers in the first year 25, in the second 43, in the third 111. [141]

PLANTS TO WHICH AWARDS HAVE BEEN MADE IN 1953

DAFFODILS

Narcissus 'Blarney's Daughter' A.M. April 14, 1953, as a variety for exhibition. A refined Large-cupped variety (Division 2b), with a flower 4 inches in diameter, well poised on a 20-inch stem. The white perianth segments were smooth and overlapping, the outer ones being $1\frac{3}{4}$ inch long and $1\frac{1}{2}$ inch broad. The neat, pleated, goblet-shaped corona, which was Orpiment Orange (H.C.C. 10/1) edged with Mimosa Yellow (H.C.C. 602/2), was $\frac{11}{16}$ inch deep, and $1\frac{3}{8}$ inch in diameter. Raised and shown by Mr. J. L. Richardson, Prospect House, Waterford, Eire.

Narcissus 'Daviot' A.M. April 28, 1953, as a variety for exhibition. An exceptionally well-formed bicolour Large-cupped Daffodil, with a flower 4 inches in diameter, borne on a stem about 17 inches long. The very smooth greenish white perianth segments were overlapping, the outer ones being $1\frac{11}{16}$ inch long and $1\frac{1}{2}$ inch broad. The neat, chalice-shaped corona, which was Apricot (H.C.C. 609) becoming paler towards the base, and edged with Aureolin (H.C.C. 3/3), was $\frac{7}{8}$ inch long and $1\frac{1}{8}$ inch across at its lightly notched margin. Raised by the Brodie of Brodie and shown by Mr. Guy L. Wilson, V.M.H., The Knockan, Broughshane, Co. Antrim.

Narcissus 'Glenbush' A.M. April 28, 1953, as a variety for exhibition. A large, refined white, Large-cupped Daffodil (Division 2c) with a flower $4\frac{3}{4}$ inches in diameter, well poised on a stout 20-inch stem. The greenish white perianth segments were broad, overlapping and smooth, the outer ones being about 2 inches long and $1\frac{13}{16}$ inch broad. The corona, which was also greenish white, was $1\frac{13}{16}$ inch long and $1\frac{7}{8}$ inch across at its reflexed and indented margin. Raised and shown by Mr. Guy L. Wilson.

Narcissus 'Himalaya' A.M. March 31, 1953, as a variety for exhibition. A large white Trumpet variety (Division 1c) with a well-formed flower about $4\frac{5}{8}$ inches in diameter borne on a 20-inch stem. The perianth segments were smooth, broad, and overlapping, the inner ones having a slight inward roll. The outer ones were nearly 2 inches long and just over 2 inches broad. The corona, which expanded slightly towards the mouth, was just over 2 inches long, and about $2\frac{3}{8}$ inches in diameter at its frilled and reflexed margin. Raised and shown by Mr. J. L. Richardson.

Narcissus 'Milan' A.M. April 14, 1953, as a variety for exhibition. A broad-perianthed *poeticus* variety (Division 9) with a flower $3\frac{1}{4}$ inches in diameter, well poised on a 16-inch stem. The broad, smooth, solid-white, perianth segments were reflexed—the inner ones slightly and the outer ones markedly—and all had an inward roll. The outer segments were just over $1\frac{3}{8}$ inch long and about $1\frac{5}{8}$ inch broad. The

disc-like corona was $1\frac{1}{16}$ inch in diameter, green at the centre, Poppy Red (H.C.C. 16) at its pleated and notched rim, and Canary Yellow (H.C.C. 2/2) in between. Raised by Mr. A. M. Wilson and shown by Mr. David W. Gourlay, The Down House, Tockington, nr. Bristol.

Narcissus 'Snipe' A.M. March 3, 1953, as a variety for cultivation in pots and pans. A pretty *cyclamineus* hybrid (Division 6a), up to 10 inches high. The reflexed, white perianth segments were just over 1 inch long and $\frac{7}{16}$ inch broad. The cylindrical corona, which was 1 inch long and $\frac{1}{2}$ inch in diameter at its slightly expanded and indented margin, was Mimosa Yellow (H.C.C. 602, passing with age to 602/2). Raised by Mr. A. M. Wilson and shown by Mr. D. W. Gourlay.

Narcissus 'Snowline' A.M. April 14, 1953, as a variety for exhibition. A giant, white Large-cupped variety (Division 2c) with a flower, 5 inches in diameter, well poised on a stout 19-inch stem. The outer perianth segments were broad, smooth and overlapping, the outer ones being $2\frac{1}{8}$ inches long and $1\frac{3}{4}$ inch broad. The neat corona was just over $1\frac{3}{4}$ inch long. Raised and shown by Mr. Guy L. Wilson.

TREES AND SHRUBS

Camellia japonica 'Alba Simplex' 'Snow Goose' A.M. April 28, 1953. On this plant the flowers are single, flat and $3\frac{1}{2}$ inches across. The petals are large, of good substance and white in colour with a little irregular, crimson flecking. The filaments are pale yellow and the anthers deep yellow. Exhibited by Sir Giles Loder, Bt., Leonardslee, Horsham, Sussex.

Camellia japonica 'Apollo' A.M. March 3, 1953. A fine garden form with flat, single flowers 4 inches across. The petals are a bright shade of Geranium Lake (H.C.C. 20/1) and contrast pleasantly with the pale filaments and bright yellow anthers. Exhibited by Sir Giles Loder, Bt., Leonardslee, Horsham, Sussex.

Camellia japonica 'Elegans' A.M. March 3, 1953. A most popular form and the one often erroneously referred to by many people as 'Chandleri Elegans.' The notched petals and petaloid stamens form an incomplete double flower with an 'Anemone' centre. The corolla is 4 inches across and variable in colour although near a light shade of Neyron Rose (H.C.C. 623). On some flowers there are irregular white markings. Exhibited by Commissioners of Crown Lands, Windsor Great Park, Berks.

Camellia japonica 'Hatsu-Sakura' A.M. March 3, 1953. An outstanding cultivar with single flowers $4\frac{1}{2}$ inches across. The large petals are thick and waxy in texture and coloured a pleasing, pale shade of Camellia Rose (H.C.C. 622), darkening a very little towards the edges. In the centre of the inflorescence is a large prominent cluster of yellow stamens many slightly petaloid. Exhibited by Commissioners of Crown Lands, Windsor Great Park, Berks.

Camellia japonica 'Nagasaki' A.M. March 3, 1953. A large-flowered variety, incomplete-double and up to $4\frac{1}{2}$ inches across. It is a

light shade of Neyron Rose (H.C.C. 623) in colour and has a limited amount of white marbling. The stamens are few, the majority adopting a large petaloid form. Exhibited by The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

Camellia japonica 'Prince Frederic William' A.M. March 17, 1953. Flowers on this pleasing Camellia are formal-double, having many rows of petals fully imbricated and without any stamens showing. Each flower is 3½ inches across and coloured a bright shade of Camellia Rose (H.C.C. 622) with a somewhat darker stain on the outside of the basal petals. Exhibited by The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

Camellia Williamsii 'Francis Hanger' (*japonica* 'Alba Simplex' × *saluenensis*) **A.M.** April 14, 1953. A new hybrid which freely shows a vigorous habit and a freedom of flowering. The single flowers are pure white, 4 inches across and centred by a prominent cluster of golden-yellow stamens. Exhibited by The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

Rhododendron Beanianum (K.W. 6805) **A.M.** March 31, 1953. Capt. F. Kingdon-Ward found this plant in upper Burma on his ninth expedition to Asia and writes of his discovery in the *Gardeners' Chronicle* (vol. LXXXI, Third Series) (1927) p. 303. Later it was named in honour of Mr. W. J. Bean, late Curator of the Royal Botanic Gardens, Kew, by Dr. J. Macqueen Cowan writing in *The New Flora and Silva*, vol. 10 (1938) pp. 245–247.

It is a distinctive shrub. The leaves are blunt-lanceolate, thick and spongy and coated on the underside with a dense, rich cinnamon-brown tomentum. Likewise the petiole is coated with tomentum. The truss is made up of about nine flowers each coloured Cardinal Red (H.C.C. 822/2). Similarly, the petaloid calyx is of the same deep colour. Exhibited by Col. Lord Digby, D.S.O., M.C., Cerne Abbey, Dorchester.

Rhododendron ciliatum A.M. March 31, 1953. A shrub from the Sikkim Himalayas found at about 10,000 ft. The nodding flowers are white with a faint tinge of pink along the centre of each petal and occur three or four in each truss. The corolla is 1½ inch long and 2 inches wide, narrow-campanulate and on a bristly pedicel. The petioles are also setose and the elliptical leaves 3 inches long and 1¼ inch wide. Exhibited by Col. Lord Digby, D.S.O., M.C., Cerne Abbey, Dorchester.

Rhododendron cinnabarinum 'Roylei' A.M. May 19, 1953. This is a colour form of *R. cinnabarinum*. Like the type it is extremely free flowering and should be planted in every Rhododendron garden. The lax, graceful truss is made up of about seven flowers. Each corolla is pendant on a short scaly pedicel and coloured on the outside Currant Red (H.C.C. 821/1), a shade which deepens towards the base and lightens near the lobes; inside the corolla is Blood Red (H.C.C. 820/2) dulled with a waxy bloom. Exhibited by Commissioners of Crown Lands, Windsor Great Park, Berks.

Rhododendron coriaceum A.M. April 14, 1953. A shrub or small tree with large, oblanceolate leaves coated on the underside with a pale fawn indumentum. The lax truss is about sixteen–twenty-flowered. In colour the flowers of different specimens vary considerably. On the plant exhibited they were white with a deep crimson blotch and a little spotting on the upper segment. Exhibited by Commissioners of Crown Lands, Windsor Great Park, Berks.

Rhododendrum fictolacteum 'Cherry Tip' A.M. April 14, 1953. A colourful variant with unopened buds a shade of bright cherry pink. It was raised from seed collected by Dr. J. C. Rock under his number 59255. The truss is a compact one containing about twenty-six flowers. Each of these is funnel-campanulate, 2 inches long and 2 inches wide. They are white in colour with some pink flushes while the upper segments are stained with a deep crimson blotch and numerous spots up to the base of the lobes. Exhibited by Col. Lord Digby, D.S.O., M.C., Cerne Abbey, Dorchester.

Rhododendron 'Hawk' 'Crest' F.C.C. April 28, 1953. A magnificent yellow-flowered hybrid of great merit and undoubtedly the finest plant yet shown from the crossing of R. 'Lady Bessborough' and *R. Wardii*.

The leaves are oblong-elliptical, 4½ inches long and 2½ inches wide, mucronate and of a stout leathery texture. On the upper surface, the foliage is a dark olive green and beneath very pale green. The large truss is composed of about twelve flowers. Each of these flowers is shallow campanulate, 2½ inches long and 4 inches wide with pronounced lobes 1½ inches long and 1¼ inches wide. The colour is Primrose Yellow (H.C.C. 601/2–601/3) with a slight darkening around the throat on the upper segments. Exhibited by E. de Rothschild, Esq., Exbury House, nr. Southampton.

Rhododendron lutescens 'Bagshot Sands' A.M. March 31, 1953. This is a fine large-flowered form. The inflorescence is composed of about thirteen flowers in a compact bunch. The corolla is a wide-funnel shape, 1 inch long, and 1½ inches across and coloured Primrose Yellow (H.C.C. 601/2) with some dark spotting chiefly on the base of the central segment. The leaves are broad-lanceolate, 3 inches long and 1 inch wide, mucronate and scaly beneath. Exhibited by Mrs. Roza M. Stevenson, Tower Court, Ascot, Berks.

Rhododendron 'Moonshine' 'Supreme' A.M. April 28, 1953. A fine hybrid made at Wisley from the cross R. 'Adriaan Koster' and *R. litiense*. About fifteen flowers make up a compact truss. The pedicels are long, pale green and glandular. The broad-campanulate corolla is 1¾ inches long and 2½ inches wide. It is coloured a shade of Primrose Yellow (H.C.C. 601/1–601/2) and has some darker staining on the upper segment together with a little indistinct spotting. Exhibited by The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

Rhododendron 'Tessa' 'Roza' A.M. March 3, 1953. A Rhododendron which will give bright colour early in the season with flowers

in clusters of threes and fours. In these the corolla is a broad-rotate-campanulate shape 1½ inches long and 2½ inches wide. It is coloured a varying shade of rosy-pink against a pale background while the upper segment is spotted with deep carmine markings; the reverse side is irregularly stained with deep pink. The leaves are a lustrous green above and pale beneath together with some scaling. Exhibited by Mrs. Roza M. Stevenson, Tower Court, Ascot, Berks.

Rhododendron obtusum 'Kaempferi' A.M. May 19, 1953. A free-flowering, loosely branched shrub found in central and northern Japan. In Britain it has proved to be a plant of great garden value and in light shade will thrive anywhere that Rhododendrons are grown. The corolla is 1¼ inch long and 1¾ inch wide with large, frilled lobes. It is coloured Camellia Rose (H.C.C. 622/1) while the tips of the lobes are a slightly darker shade. The stamens are rosy pink. Exhibited by Commissioners of Crown Lands, Windsor Great Park, Berks.

Rhododendron 'Tensing' A.M. May 19, 1953. A new hybrid raised from the crossing of R. 'Fabia' and R. 'Romany Chai' which, in turn, are both hybrids of *R. Griersonianum*. The large truss is loosely formed, has a flat top and is composed of thirteen creped-lobed flowers. The pedicel is 1 inch long, stout and, like the underside of the leaves, covered with a light tomentum which is soon glabrous. The corolla is 3 inches long and 4 inches wide, funnel-campanulate and the tube characteristically cylindric and furrowed for a third of the corolla. In colour this hybrid is a shade of Camellia Rose (H.C.C. 622) which gradually merges into a tinge of orange in the throat. Exhibited by The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

ORCHIDS

Cymbidium 'Hawtescens' var. 'Aureolin' A.M. May 19, 1953. This plant was obtained from the same cross that produced 'Hawtescens' ('Lutescens' × 'Hawfinch'), the latter obtaining an Award of Merit on March 31, 1953. This variety has similar basic chrome yellow flowers but without the brownish flush on the sepals and petals. The lip has brownish red markings with a pale flush of the same shade around the margin. The crest was soft lemon and the column has a brown reverse. Exhibited by McBean's Orchids, Ltd., Cooksbridge, Sussex.

Odontoglossum 'Crispatrium' A.M. May 19, 1953. The result of crossing *crispum* with 'Natrium.' The plant exhibited bore a spike of seven flowers close together on the stem. The two lower sepals were brownish yellow while the three other sepals and petals were of a brighter colour. The lower half of the lip was a clear creamy yellow. Each part of the flower was liberally marked with dark reddish brown. In addition the column has a conspicuous brown apex. Exhibited by Messrs. Charlesworth & Co., Ltd., Haywards Heath, Sussex.

Odontoglossum 'Crispinum' var. 'Delicatum' A.M. May 19, 1953. This variety was obtained by crossing *crispum* with *citrinum*. It had five large blooms, 3½ inches by 3 inches, on the spike exhibited.

Each flower was a delicate, clear creamy colour with an occasional dark reddish spot on the sepals and petals. The lip was an even paler ivory colour except for the sulphur coloured crest and a number of tiny dark reddish dots. Exhibited by Messrs. Charlesworth & Co., Ltd., Haywards Heath, Sussex.

Odontoglossum 'Toreador' var. 'Taurea' A.M. May 19, 1953. The result of crossing *O. crispum* with *O.* 'Laurentia.' A spike of seven large flowers each nearly 4 inches by $3\frac{1}{2}$ inches. All parts of the flower have a white background but the sepals and petals have in addition dark reddish brown patches interspersed with areas of pale mauve shading. The lower part of the lip was a clear white, while higher up there was a yellow flush around the crest. Exhibited by K. D. Morgenstern, Esq., 18 Lyttelton Road, Finchley, N. 2.

BOOK NOTES

"Royal Gardens." By Lanning Roper. Illus. 96 pp. (W. H. & L. Collingridge Ltd.) 15*s*.

To the glories of the British Crown, so resplendently displayed in recent weeks, may be accounted others, possibly less evident but certainly of little smaller appeal to many of Her Majesty's subjects, namely, the Royal Gardens of England and Scotland.

The late Lord Aberconway, in a notable tribute in these pages to King George VI, pointed out that while the Royal Horticultural Society is proud to have enjoyed the patronage of the Sovereign since George III, none of His Majesty's predecessors took such a personal interest in horticulture or had so extensive a knowledge of plants. The present state of perfection of the Royal Gardens, depicted in this album of photographs, which Mr. Lanning Roper has compiled, must be regarded as a memorial to King George VI as a gardener.

Photographs of the gardens of Buckingham Palace, Windsor Castle, Sandringham, Balmoral, Royal Lodge, Windsor Park, and the Palace of Holyroodhouse are all included. Possibly the most interesting of all are those of the Commissioners of Crown Lands in Windsor Great Park, particularly those portions which His late Majesty ordained should be designated the Savill Gardens, after Mr. E. H. Savill, by whose skill they have been developed under the instructed interest of King George VI. These gardens must surely for long, if not always, remain the most important manifestation of the Royal interest in horticulture, so inspired are they with the ideals and spirit of gardening of the late King's reign.

Mr. Roper's book also shows how the Royal Gardens epitomize the gardening interests of all the Sovereign's subjects; the "bedded-out" red "Geraniums" outside Buckingham Palace; the herbaceous borders at Sandringham; the rock-garden in the moat of the Norman Tower at Windsor Castle; and the quite fascinating, homely and belovedly typical small garden of the Scottish country house at Birkhall in Aberdeenshire. Photographs of these and of much else besides, and an instructive foreword and introduction by Mr. G. A. Jellicoe, F.R.I.B.A., and the compiler respectively, contribute to make a book of great interest to all gardeners. Published at so appropriate a moment it may perhaps be carried homeward overseas as a souvenir of visits to many of the gardens it portrays in this Royal and memorable summer.

MORTON

"Strawberry Cultivation." By Edward Hyams. Illus. 162 pp. (Faber & Faber Ltd.) 18*s*.

This well-written book will arouse considerable interest in the subject of Strawberry growing in this country, both from an amateur and professional point of view.

Mr. Edward Hyams shows most clearly how, with little artificial aid and the

varieties he recommends, Strawberries can be produced during nine months of the year, a remarkable contrast to the present short season.

In the absorbing chapter on the origin of the Strawberry, he illustrates their gradual development from the wild woodland species with small fruits, dating as far back as the fourteenth century, up to the carefully chosen varieties with large fruits, which are grown more in Europe than in this country to-day.

He introduces and shows considerable preference for the perpetual large-fruited "remontant" varieties for autumn-fruiting, particularly 'La Sans Rivale,' 'Triomphe,' 'St. Claude' and 'Record,' which, he says, can with regularity carry far heavier crops than any of the summer Strawberries at present grown. He is critical of the Englishman's fancy for the large short-season berries and he encourages a change of heart.

By arranging varieties into three groups, the author covers the period from March to November, relying upon the English summer Strawberries for picking both under glass and in the open until July, and the small-fruited Alpines or the larger-fruited perpetual (remontants) from June to November. Useful recommendations are given for the cultivation of the three groups.

In his chapter on propagation there is much of interest, particularly with regard to the performance of runners of the remontant varieties and also the raising of Alpine Strawberries from seed.

It is surprising to find that Mr. Hyams shows little respect or appreciation of the valuable work of East Malling Research Station in the raising and maintenance of special virus-free stocks of the most popular and luscious English varieties. Amongst many critical remarks directed mainly at the well-known and valued variety 'Royal Sovereign,' he asserts that it has had its day and "is more of a nuisance than it is worth," remarks which are not likely to influence those who are aware of the value of quality and flavour and the healthy stocks available, thanks to the work of research in this country.

In consideration of all that is being done in the control of virus diseases in this country, it is to be hoped that, in introducing these new varieties from Europe, the author can also ensure virus-free stocks for distribution.

BEATRIX HAVERGAL, N.D.H.

"How to do the Flowers." By Constance Spry. 69 pp. 49 reproductions, 25 in colour. (J. M. Dent & Sons Ltd.) 7*s*. 6*d*.

After reading Mr. Nichols' eulogy in this book it was hoped to find something superlative. But it is not so good as might be expected from Mrs. Spry. The letterpress is, however, full of detailed ideas and help and the illustrations are very satisfactory—for coloured photographs.

Some of the pictures indicate arrangements that appear too large for the containers and some are much too crowded. If the public likes that sort of thing there seems to be room for improvement in its taste and few are more capable of helping to improve it than the author by some of her books on this subject.

FRANK GALSWORTHY

"Geraniums." By Derek Clifford. 84 pp. Illus. (Ernest Benn Limited.) 5*s*.

Mr. Clifford has written a practical inexpensive book for all lovers of Geraniums, but it will be particularly useful as a guide for the small gardener, whether in town or country. At the outset he clarifies the problem of the two generic terms, *Pelargonium* and *Geranium*, and uses them in their popular sense rather than in the strict botanical sense throughout the book. He further divides them into four types—Zonal, Ivy-leaved, Scented and Regal Pelargoniums.

His chapters on the requirements, propagation and culture of Geraniums are concise and instructive. I found particularly useful the lists of those varieties which are recommended for the garden and those for the house and the collector. It is all too tempting to buy unusual varieties for outdoor plants and then after nursing them through a season to discover that they are shy flowerers in the open.

Mr. J. E. Downward's (not Downland as stated in the introduction) excellent full page photographs and coloured cover illustration add much to the charm and usefulness of the book, which will help to incite more good gardeners into becoming enthusiastic collectors of this popular old favourite.

LANNING ROPER

"Dutch Lights—Their Construction, Irrigation and Cropping." Illus. 32 pp. (Landsman's Library Publications.) 2*s*.

The author of this small volume hides under the pen-name "Headland" but we are told on the opening page that he is a well-known lecturer and adviser in horticulture. In any case he has an authoritative grasp of his subject and his approach is an extremely practical one for the commercial grower. Facts have been assembled and an excellent case has been presented for the practicality and adaptability of Dutch lights, not only as a protection against cold but against wind, rain and fog. Problems of construction, preservation, soil warming and irrigation are covered in the first part of the book while the latter half is devoted to cropping charts and cropping methods for both vegetables and flowers.

LANNING ROPER

"Vegetable Growing." By James Sheldon Shoemaker. 3rd Edition. vi + 515 pp. Illus. (John Wiley & Sons, Inc., N.Y., and Chapman and Hall, Ltd., London.) 48*s*.

This is a very complete volume on the many aspects of vegetable culture, designed for the large grower, the research student, and the commercial producer alike. The first edition was reviewed at length in this JOURNAL, Vol. **73**, 267.

The third edition has been brought up to date by the inclusion of much new material including information on improved cultural practices, new techniques of harvesting and storing, and accounts of hybrid novelties. The last chapter entitled "Herbicides, Insecticides, and Fungicides" contains the latest information on plant diseases and pest control as well as weed control and even hormone growth regulators. The Bibliography at the end listing 454 items gives a very complete coverage of the literature dealing with vegetable culture.

Many of the vegetables discussed are little grown in this country and the conditions described apply particularly to the United States but there is much very valuable information to be obtained from this scholarly and well-produced book.

LANNING ROPER

"Allotment Gardening." By Martyn T. Hall. 128 pp. Illus. (Ward, Lock & Co., Ltd.) 3*s*. 6*d*.

This is one of the most straightforward and practical books that has come my way in a long time, and it will fill a need not only with allotment holders but with the small home gardener as well. It gives excellent advice as to the size of the allotment, choice of location and the difficulties of water supply and wind exposure of the average holding. There are excellent chapters dealing with the treatment of paths and hedges, the preparation of the soil, fertilizing and manuring, tools and their uses and the procurement of seed.

A chapter is devoted to each of the major vegetables treating all the phases of culture, pest control, harvesting and storage. The various operations are simply described but in sufficient detail to make it possible to carry them out intelligently with the help of the well-chosen illustrations.

"Allotment Gardening" fills a real need, for as one travels about the country it is apparent that the allotment is here to stay.

LANNING ROPER

"Cyclamen Persicum, Its Natural and Cultivated Forms." By Walter C. Blasdale. 49 pp. Illus. (Stanford University Press and Geoffrey Cumberlege, Oxford University Press.) 12*s*.

Professor Blasdale has divided his volume into four sections. The first is devoted to early accounts of the species and the problems of nomenclature and geographical distribution. The second section describes with the aid of line drawings distinctive morphological characters. Section three describes the life-cycle and it is here that the horticulturist will find much of interest. Prof. Blasdale's statement that the species of Cyclamen are poor seed producers makes me wonder if he has seen the great sheets of naturalized Cyclamen species in various English gardens. It is true, of course, as the author points out that little has been attempted with the species of this genus in the United States.

Section four is devoted to an account of *C. persicum* in cultivation and a discussion of various hybrid strains which have been developed in the United States, Europe and this country as well as a brief description of greenhouse cultivation. The suggested use of this plant for bedding in the favourable California climate is a novel idea.

The illustrations include drawings from old herbals as well as photographs of actual plants.

LANNING ROPER

"Common Farm Weeds." Plant Protection Ltd. viii + 172 pp. Illus. (Butterworths Scientific Publications). 15*s*.

Sir Edward Salisbury in his brief Foreword makes the following statement: "Modern methods of weed suppression by herbicides depend upon the application of the appropriate weed-killer at the most susceptible phase in their life-history and their accurate identification is almost a prerequisite if our crops are to be freed from competition and our labour not spent in vain." It is with this identification that the book is concerned. The weeds, about eighty in number, are divided into two classes, arable and grassland, and further grouped by the colour of the flowers. Each species is portrayed in its seedling or juvenile state and later in flower. The text in table form which accompanies each photograph gives descriptions of the habit, leaves, flowers, stems and other peculiar points of recognition. The Latin specific name is given as well as the common vernacular ones. The book is only concerned with the identification of weeds; it in no way deals with problems of control.

The following books have been received:

"Census of Woodlands, 1947–1949. Woodlands of Five Acres and Over." Forestry Commission Census Report No. 1. 264 pp. (Her Majesty's Stationery Office.) 12*s*. 6*d*.

"Journal of Experimental Botany." An official organ of the Society for Experimental Biology. T. A. Bennet-Clark, Editor. 439 pp. Illus. (Geoffrey Cumberlege, Oxford University Press.) 16*s*.

"Flore Illustrée des Jardins et des Parcs. Arbres, Arbustes et Fleur de pleine terre." Tome III. Sympétales ou Gamopétales. Encyclopédie Biologique, Vol. XLIV. 536 pp. (Paul Lechevalier, Paris.)

"Welsh County Details. Woods of Five Acres and Over" Forestry Commission Census Report No. 3. 90 pp. (Her Majesty's Stationery Office.) 4*s*.

"Murphy Insecticides, Fungicides, Fumigants for Nurserymen." 112 pp. (Leagrave Press Ltd.)

"Plant Environment and the Grower." By Sidney D. Searle. 50 pp. Illus. (C. F. Casella & Co. Ltd.) 5*s*.

"Coronation Souvenir Journal." Published by the British Flower Industry Association. Obtainable from The Secretary, F.B.I.A. 112 pp. Illus. 2*s*. 6*d*.

"Bibliotheca Gastronomica." A Catalogue of Books and Documents on Gastronomy. Compiled and annotated by Andre L. Simon. (The Wine and Food Society: London). £4 4*s*.

" Unsere Lilien im Garten." Dr. agr. h.c. Alexander Steffen. 120 pp. Illus. (Paul Parey, Berlin and Hamburg). D.M. 6.60.

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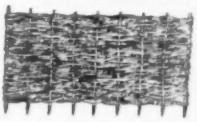

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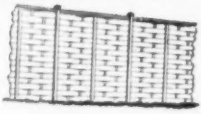

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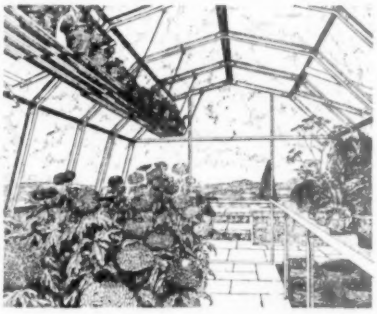

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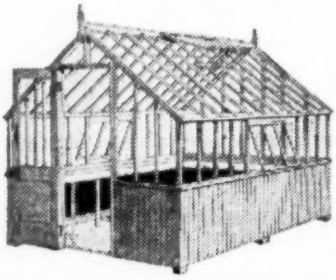

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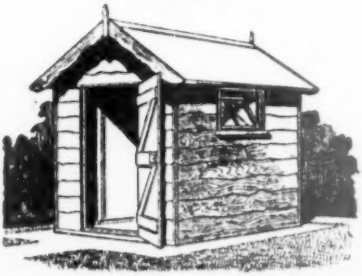

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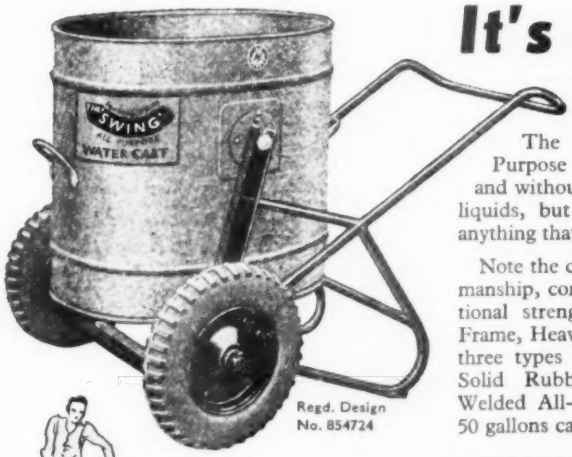

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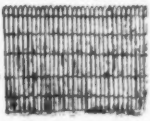

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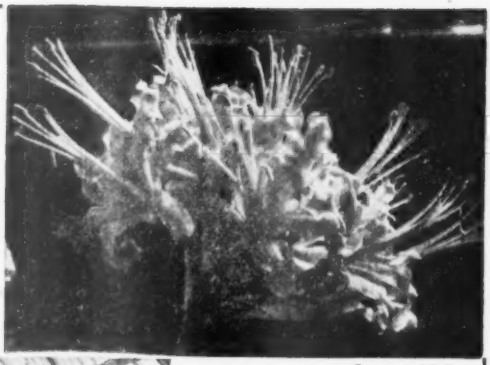
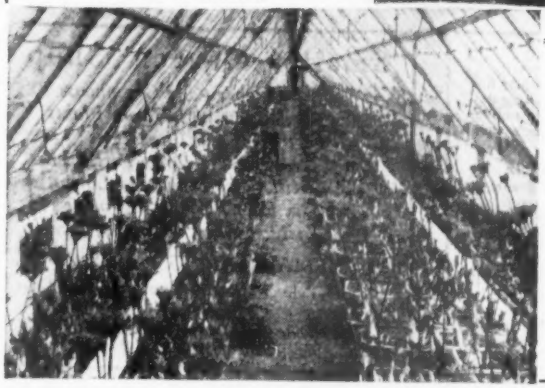


Corusca Major

A Nerine house at our nurseries



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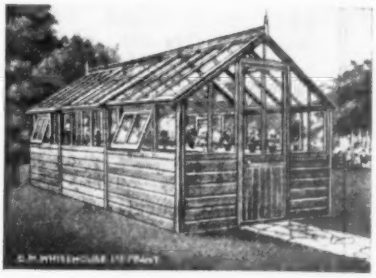

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2½ ft.	5 0	7 0	10 0	15 0
3 ft.	6 0	8 0	12 6	17 6
4 ft.	10 0	13 6	22 6	27 6
5 ft.	25 0	30 0	35 0	40 0
6 ft.	30 0	35 0	40 0	45 0
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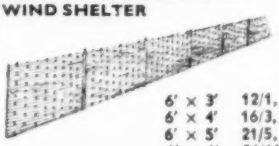

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